

GLWA

Great Lakes Water Authority



Monthly Financial Report Binder

December 2018

**Presented to the
Great Lakes Water Authority
Audit Committee
on March 15, 2019**

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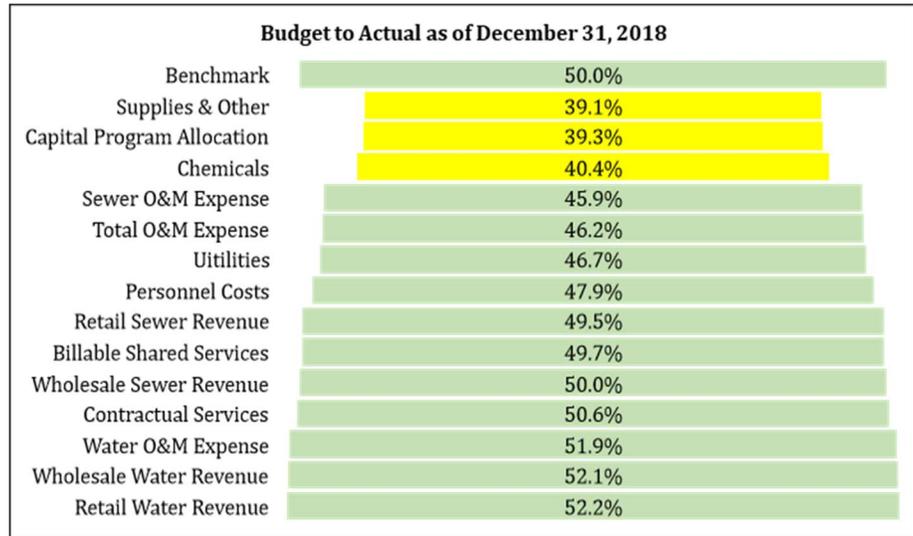
Revenue and Expense Budget to Actual¹ – Pro-rata Benchmark of 50%

Most categories are within 5% of the pro-rata benchmark.

Supplies & Other: Due to timing of one-time or annual expenses.

Capital Program Allocation: Ongoing analysis of team member time assigned to maintenance programs versus capitalizable projects.

Chemicals: Expected variance as usage does not follow a 1/12th monthly budget pattern.



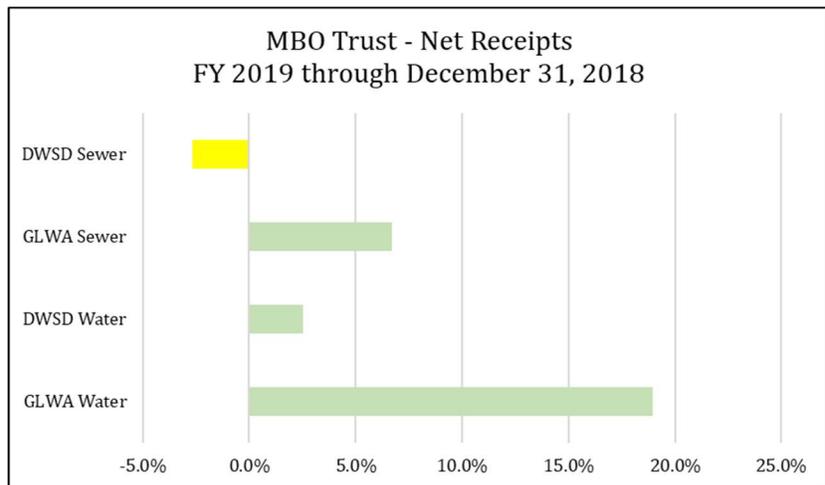
Master Bond Ordinance Trust Net Receipts

Overall cash flow for GLWA is positive.

DWSD net water cash flows are positive, although DWSD sewer cash flows continue an overall negative trend.

During the development of this report DWSD made a principal payment of nearly \$7 million towards the loan receivable associated with the FY 2016 and FY 2017

sewer cash receipts shortfall of \$29.3 million. This will be reported as part of February 2019 *Trust Receipts and Disbursements* report activity.



Other Topics

Highland Park’s total receivable balance is \$41.7 million. FY 2019 cash receipts equal \$629,000 through December 30, 2018, although a \$2.1 million payment has been subsequently received and will be reflected in the January 2019 report activity.

Questions? Contact the Office of the Chief Financial Officer at CFO@glwater.org

¹ All amounts are GLWA entity-wide unless noted as water, sewer, and/or retail.

The Monthly Budget to Actual Analysis report includes the following three sections.

1. Revenue Requirement Budget Basis Analysis
2. Operations & Maintenance Budget – Major Budget Categories
3. Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

Revenue Requirement Budget Basis Analysis

GLWA's annual revenue requirement represents a) the basis for calculating Member Partner charges and b) the Master Bond Ordinance flow of funds. The budget basis is not the same as the full accrual basis used for financial reporting although the revenues and operations and maintenance expense are largely reported on an accrual basis. The primary deviation between the revenue requirement basis to the financial reporting basis is the treatment of debt service, legacy pension obligations, and lease related activities. The Revenue Requirement Basis is foundational to GLWA's daily operations, financial plan, and of most interest to key stakeholders.

Table 1A – Water Revenue Requirement Budget and **Table 1B – Sewer Revenue Requirement Budget** presents a year-over-year budget to actual performance report. The revenue requirement budget is accounted for in the operations and maintenance fund for each system. Since this report is for December 2018, the pro-rata benchmark is 50.0% (6 of 12 months of the fiscal year).

Items of key interest discussed below are highlighted in gold on Tables 1A (Water) and 1B (Sewer).

1. For *both* systems, FY 2019 revenues are at or above target and are consistent with the prior year (FY 2018) at the same time. Detailed schedules related to revenues are provided in the *Wholesale Billings, Collections, and Receivables* section of this financial report binder.
2. The operations and maintenance (O&M) expense for both systems are less than the pro-rata benchmark; the *water* system is slightly under the pro-rata benchmark for FY 2019 at 48.3%, while the *sewer* system O&M expense is at 44.9%. This variance between the funds is partly due to a project in-process to refine centralized and administrative cost allocations. It is likely that this will result in a budget amendment after the December 2018 month-end close.
3. The remaining revenue requirements and debt service for *both* systems are funded on a 1/12th basis each month in accordance with the Master Bond Ordinance. In October 2018, the GLWA had a successful bond sale which will provide a positive budget variance for *both* systems. That amendment will be reported in a future budget amendment.
4. Overall total revenue requirements for *both* systems are in line with the benchmark.

5. Investment earnings remain on target for both systems. Detailed analysis of investment earnings activity to date can be found in the *Cash & Investment Income* section of this financial report binder.
6. Other revenues are one-time and unusual items that do not fit an established revenue category. Both the water and sewer systems will vary from budget due to the nature of the items recorded in this category. For example, in FY 2018 the variance reported for the sewer system was due, in large part, to fire remediation insurance proceeds received.

- continued -

Table 1A – Water Revenue Requirement Budget (year-over-year)

Water System	FY2018 AMENDED BUDGET	FY 2018 THRU 12/31/2017	Percent Year-to- Date	FY 2019 AMENDED BUDGET	FY 2019 THRU 12/31/2018	Percent Year-to- Date
Revenues						
Wholesale Customer Charges	\$ 310,019,800	\$ 170,882,300	55.1%	\$ 307,382,500	\$ 165,078,600	53.7%
Retail Services Agreement	15,130,600	7,565,300	50.0%	20,181,400	10,163,100	50.4%
Investment Earnings	2,932,900	1,462,100	49.9%	3,802,300	1,972,100	51.9%
Other Revenues	35,900	82,400	229.5%	34,300	31,800	92.7%
Transfer In	-	199,900	0.0%	-	2,153,500	0.0%
Total Revenues	\$ 328,119,200	\$ 180,192,000	54.9%	\$ 331,400,500	\$ 179,399,100	54.1%
Revenue Requirements						
Operations & Maintenance Expense	\$ 121,562,500	\$ 37,764,300	31.1%	\$ 121,562,600	\$ 58,671,100	48.3%
O&M Legacy Pension	6,048,000	3,024,000	50.0%	6,048,000	3,024,000	50.0%
Debt Service	135,631,200	67,815,600	50.0%	134,214,600	67,107,300	50.0%
Accelerated Legacy Pension	6,268,300	3,134,150	50.0%	6,268,300	3,134,150	50.0%
Extraordinary Repair & Replacement						
Deposit	1,452,500	726,250	50.0%	-	-	0.0%
Lease Payment	22,500,000	11,250,000	50.0%	22,500,000	11,250,000	50.0%
Operating Reserve Deposit	323,700	161,850	50.0%	-	-	0.0%
Water Residential Assistance Program	1,678,600	839,300	50.0%	1,673,400	836,700	50.0%
Improvement & Extension Fund						
Deposit	32,654,400	16,327,200	50.0%	39,133,600	19,566,800	50.0%
Total Revenue Requirements	\$ 328,119,200	\$ 141,042,650	43.0%	\$ 331,400,500	\$ 163,590,050	49.4%
Net Difference		\$ 39,149,350			\$ 15,809,050	

Table 1B – Sewer Revenue Requirement Budget (year-over-year)

Sewer System	FY2018 AMENDED BUDGET	FY 2018 THRU 12/31/2017	Percent Year-to- Date	FY 2019 AMENDED BUDGET	FY 2019 THRU 12/31/2018	Percent Year-to- Date
Revenues						
Wholesale Customer Charges	\$ 271,429,300	\$ 135,715,800	50.0%	\$ 271,296,300	\$ 137,476,800	50.7%
Retail Services Agreement	178,969,100	89,484,600	50.0%	181,159,300	91,503,800	50.5%
Industrial Waste Control Charges	14,457,700	7,178,000	49.6%	15,005,800	4,607,700	30.7%
Pollutant Surcharges	5,099,000	3,038,700	59.6%	-	3,012,200	0.0%
Other Revenues	370,800	3,622,800	977.0%	480,200	802,300	167.1%
Investment Earnings	2,283,800	1,638,400	71.7%	4,085,700	2,888,000	70.7%
Transfer In	-	23,600	0.0%	-	672,100	0.0%
Bad Debt Expense Recovery	-	-	0.0%	-	-	0.0%
Total Revenues	\$ 472,609,700	\$ 240,701,900	50.9%	\$ 472,027,300	\$ 240,962,900	51.0%
Revenue Requirements						
Operations & Maintenance Expense	\$ 190,988,000	68,916,800	36.1%	\$ 191,079,400	\$ 85,870,600	44.9%
O&M Legacy Pension	10,824,000	5,412,000	50.0%	10,824,000	5,412,000	50.0%
Debt Service	205,859,900	102,929,950	50.0%	214,600,700	107,300,350	50.0%
Accelerated Legacy Pension	11,620,700	5,810,350	50.0%	11,620,700	5,810,350	50.0%
Extraordinary Repair & Replacement						
Deposit	2,283,100	1,141,550	50.0%	-	-	0.0%
Lease Payment	27,500,000	13,750,000	50.0%	27,500,000	13,750,000	50.0%
Operating Reserve Deposit	341,600	170,800	50.0%	-	-	0.0%
Water Residential Assistance Program	2,313,700	1,156,850	50.0%	2,374,100	1,187,050	50.0%
Improvement & Extension Fund						
Deposit	20,878,700	10,439,350	50.0%	14,028,400	7,014,200	50.0%
Total Revenue Requirements	\$ 472,609,700	\$ 209,727,650	44.4%	\$ 472,027,300	\$ 226,344,550	48.0%
Net Difference		\$ 30,974,250			\$ 14,618,350	

Operations & Maintenance Budget – Major Budget Categories

The year-over-year benchmark ratio as of December 31, 2018, is 50.0% (six months). When comparing FY 2019 to FY 2018 in **Table 2 – Operations & Maintenance Budget – Major Budget Categories**, it appears spending has increased. This is true in some instances; however, the greater impact is that the Financial Reporting & Accounting Team has implemented a full accrual basis for interim financial statements during the latter half of FY 2018. This variance anomaly will decrease as we proceed through FY 2019.

In addition to the four major budget categories, an internal charge cost center for employee benefits is shown in the table below. If the number is positive, it indicates that the internal cost allocation rate charges to other cost centers is not sufficient. A negative number indicates a surplus in the internal cost center. A moderate surplus is preferred as it provides a hedge for mid-year benefit program cost adjustments (premiums adjust on January 1 each year) as well as managing risk as the program is partially self-insured.

Table 2 – Operations & Maintenance Budget – Major Budget Categories

Major Budget Categories	FY2018		Percent Year-to-Date	FY 2019		Percent Year-to-Date
	AMENDED BUDGET	FY 2018 THRU 12/31/2017		AMENDED BUDGET	FY 2019 THRU 12/31/2018	
Water	\$ 73,510,500	\$ 19,622,500	26.7%	\$ 66,596,200	\$ 34,552,000	51.9%
Sewer	124,106,400	43,009,400	34.7%	118,318,900	54,265,100	45.9%
Centralized	82,628,700	34,025,900	41.2%	99,044,500	44,250,300	44.7%
Administrative	32,304,900	11,688,300	36.2%	28,682,400	12,715,900	44.3%
Employee Benefits	-	(1,665,000)	0.0%	-	(1,241,600)	0.0%
Total Revenues	\$ 312,550,500	\$ 106,681,100	34.1%	\$ 312,642,000	\$ 144,541,700	46.2%

Alignment of Operations & Maintenance Budget Priorities – Expense Variance Analysis

The purpose of **Table 3 – Expense Variance Analysis** is to evaluate whether the actual spend rate within a natural cost category is in alignment with the budget. Given the effort to develop an accurate budget, a variance is a red flag of a *potential* budget amendment or misalignment of priorities.

In total, the O&M expenses are at 46.2% which is reasonably close to the pro-rata benchmark of 50.0%. This positive variance equates to a dollar amount of \$11.8 million. The expense category commentary is provided below for items highlighted on Table 3.

Personnel Costs: The overall category is on target at 47.9% through December 2018.

Utilities: The overall category is slightly lower than the benchmark; coming in at 46.7%. Variances in this category are not unexpected given the seasonality of the operations. In comparing FY 2019 to FY 2018 the expenses appear more in line with the budget in FY 2019. This is due in large part to the month-end closing process improvements implemented during the latter half of FY 2018.

Chemicals: This category is lower than the benchmark; coming in at 40.4% through December 2018. This variance is not unexpected as usage varies throughout the year. Staff is working on enhancements to future monthly financial reports to correlate spending with operational metrics.

Supplies & Other: This category is lower than the benchmark; coming in at 39.1% through December 2018. An internal review is underway to better understand the causes for this variance. Given that the nature of the items in this category are subject to one-time expenses that do not occur evenly throughout the year, this variance is not a concern at this time.

Contractual Services: The overall category is on target at 50.6% through December 2018.

Capital Program Allocation: This category is lower than the benchmark; coming in at 39.3% through December 2018. In July 2018, GLWA launched a time keeping software (including an app), BigTime, to make it easier for team members to report their time spent on direct capital delivery. New processes are currently being evaluated to better understand staff resource allocation when the budget was developed versus how time is actually incurred – including time allocated to maintenance programs versus capitalizable projects.

Shared Services: The shared services reimbursement is comprised of both labor (tracked via BigTime) and expenses, such as annual fees for software licensing. Staff from both GLWA and DWSD have been working together to evaluate and refine the budget for the shared services agreements. In December 2018, adjustments were made to both the billings and accounting accruals to bring them in line with the amended shared services budget. As of December 2018, this category is now on target at 49.7%.

Table 3 – Expense Variance Analysis

Expense Categories	FY2018 AMENDED BUDGET	FY 2018 THRU 12/31/2017	Percent Year-to- Date	FY 2019 AMENDED BUDGET	FY 2019 PRORATED AMENDED BUDGET (6 MONTHS)	FY 2019 THRU 12/31/2018	Percent Year-to- Date	FY 2019 PRORATED BUDGET LESS FY 2019 ACTIVITY
Entity-wide								
2.1 Salaries & Wages	\$ 57,113,800	\$ 24,297,500	42.5%	\$ 64,160,400	\$ 32,080,200	\$ 30,025,600	46.8%	\$ 2,054,600
2.2 Workforce								
Development	661,500	248,400	37.6%	740,200	370,100	367,700	49.7%	2,400
2.3 Overtime	6,516,600	3,069,300	47.1%	6,756,300	3,378,150	3,761,300	55.7%	(383,150)
2.4 Employee Benefits	20,998,900	11,228,000	53.5%	22,255,300	11,127,650	12,481,300	56.1%	(1,353,650)
2.5 Transition Services	13,865,100	4,439,300	32.0%	11,189,100	5,616,550	3,723,600	33.3%	1,892,950
2.6 Personnel Transition Adjustment	(1,557,200)	-	0.0%	(2,586,200)	(1,293,100)	-	0.0%	(1,293,100)
8.0 Employee Benefits Fund	-	(1,665,000)	0.0%	-	-	(1,241,600)	0.0%	1,241,600
Personnel Costs	97,598,700	41,617,500	42.6%	102,515,100	51,279,550	49,117,900	47.9%	2,161,650
3.1 Electric	42,324,400	10,726,600	25.3%	42,132,600	21,066,300	20,952,900	49.7%	113,400
3.2 Gas	7,029,500	1,461,600	20.8%	6,854,400	3,427,200	2,700,100	39.4%	727,100
3.3 Sewage Service	2,030,500	584,100	28.8%	2,544,000	1,272,000	1,035,600	40.7%	236,400
3.4 Water Service	4,587,600	1,800,400	39.2%	5,781,500	2,890,750	2,085,600	36.1%	805,150
Utilities	55,972,000	14,572,700	26.0%	57,312,500	28,656,250	26,774,200	46.7%	1,882,050
4.1 Chemicals	13,340,600	6,360,700	47.7%	16,620,900	8,310,450	6,712,400	40.4%	1,598,050
4.2 Supplies & Other	41,770,900	12,941,000	31.0%	36,405,600	18,202,800	14,230,100	39.1%	3,972,700
4.3 Contractual Services	113,680,100	35,632,100	31.3%	106,342,000	52,987,600	53,814,300	50.6%	(826,700)
5.1 Capital Program Allocation	(2,012,900)	(699,900)	34.8%	(4,000,000)	(2,000,000)	(1,570,600)	39.3%	(429,400)
5.2 Shared Services	(10,109,500)	(3,742,900)	37.0%	(9,123,100)	(4,635,750)	(4,536,900)	49.7%	(98,850)
7.0 Unallocated Reserve	2,310,600	-	0.0%	6,569,100	3,520,150	-	0.0%	3,520,150
Total Expenses	\$ 312,550,500	\$ 106,681,200	34.1%	\$ 312,642,100	\$ 156,321,050	\$ 144,541,400	46.2%	\$ 11,779,650

The Basic Financial Statements report includes the following four tables.

1. Statement of Net Position - All Funds Combined
2. Statement of Revenues, Expenses and Changes in Net Position – All Funds Combined
3. Supplemental Schedule of Operations & Maintenance Expenses -All Funds Combined
4. Supplemental Schedule of Nonoperating Expenses – All Funds Combined

GLWA utilizes four funds daily. At the macro level for financial reporting purposes, GLWA has two primary funds: *Water Fund* and *Sewage Disposal Fund*. These funds represent the combined total of four sub-funds for each system that are used to properly account for sources and uses of funds. Those sub-funds for each system are: *Operations & Maintenance Fund, Improvement & Extension Fund, Construction Bond Fund, and Capital Asset Fund*.

Statement of Net Position – All Funds Combined

Explanatory notes follow the Statement of Net Position shown in Table 1 below.

**Table 1 – Statement of Net Position - All Funds Combined
 As of December 31, 2018**

	Water	Sewage Disposal	Total Business- type Activities	Comparative June 30, 2018
Assets				
Cash (a)	\$ 197,003,000	\$ 213,550,000	\$ 410,553,000	\$ 671,753,000
Investments (a)	367,990,000	277,942,000	645,932,000	343,235,000
Accounts Receivable	110,717,000	101,032,000	211,749,000	191,359,000
Due from Other Funds (b)	6,502,000	-	6,502,000	32,255,000
Other Assets (c)	605,559,000	455,920,000	1,061,479,000	985,888,000
Cash Held FBO DWSD Advance (d)	-	21,943,000	21,943,000	18,468,000
Capital Assets, net of depreciation	1,721,398,000	2,522,981,000	4,244,378,000	4,402,212,000
Construction Work in Process	174,989,000	188,423,000	363,413,000	288,052,000
Total Assets	3,184,158,000	3,781,790,000	6,965,948,000	6,933,222,000
Deferred Inflow (e)	89,576,000	173,308,000	262,885,000	332,992,000
Liabilities				
Liabilities – Short-Term (f)	149,036,000	157,091,000	306,127,000	270,446,000
Due to Other Funds (b)	-	6,502,000	6,502,000	32,255,000
Other Liabilities (g)	2,828,000	6,247,000	9,075,000	8,638,000
Cash Held FBO DWSD (d)	10,174,000	-	10,174,000	8,902,000
Liabilities – Long-Term (h)	3,105,466,000	3,843,937,000	6,949,403,000	6,998,296,000
Total Liabilities	3,267,504,000	4,013,778,000	7,281,282,000	7,318,537,000
Deferred Outflow (e)	66,843,000	57,629,000	124,472,000	126,432,000
Net Position Deficit (i)	\$ (60,612,000)	\$ (116,309,000)	\$ (176,921,000)	\$ (178,755,000)

Totals may be off due to rounding.

In general, the Statement of Net Position reflects a mature organization with no unexpected trends. One item of note as of December 31, 2018 cash balances are lower and investment balances are higher when compared to June 30, 2018 (highlighted in gold on Table 1). In total, cash and investment balances are comparable between the two periods. Cash balances are typically higher at June 30, 2018 to meet annual debt and interest payments, legacy pension obligation payments, and annual operational requirements.

An ongoing challenge is the Net Position Deficit. The underlying causes took years to build (largely heavy use of debt to finance capital asset investment versus a strategic blend of debt, state revolving funds, and cash). The effect is reflected in GLWA's high debt interest expense. The GLWA is regularly updating the FY 2030 forecast which helps to provide a pathway to a positive Net Position.

Footnotes to Statement of Net Position

- a. *Cash and Investments* include restricted amounts and are reported at book value. Investments at June 30, 2018 are reported at market value.
- b. *Due from Other Funds* and *Due to Other Funds* is shown at the gross level for sub-fund activity.
- c. *Other Assets* primarily consists of the contractual obligation receivable from DWSD related to reimbursement of bonded indebtedness for local system improvements.
- d. *Cash Held FBO Advance (for benefit of) DWSD* and *Cash Held FBO DWSD* represents the net difference between DWSD retail cash received from customers and net financial commitments as outlined in the Master Bond Ordinance.
- e. *Deferred Inflow* and *Deferred Outflow* relate to financing activity and GLWA's share of the legacy General Retirement System (GRS) pension obligation.
- f. *Liabilities - Short-term* include accounts payable, retainage payable, and certain accrued liabilities. Some items, such as compensated absences and worker's compensation, are reviewed periodically but are only adjusted on an interim basis if there is a material change.
- g. *Other Liabilities* account for the cash receipts set aside for the Budget Stabilization Fund and the Water Residential Assistance Program.
- h. *Liabilities - Long-term* include bonds payable, lease payable, and legacy GRS pension liabilities.
- i. *Net Position Deficit* is defined by the accounting standards as the residual of all other elements presented in a statement of financial position. It is the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. A net deficit occurs when the liabilities and deferred inflows exceed assets and deferred outflows. GLWA's net deficit is largely driven by an increase in depreciation expense as a result of the increase in the acquisition valuation approach for recording capital asset values in the opening Statement of Net Position on January 1, 2016. Efforts are underway to evaluate the net operating effect of this matter over the long term.

Statement of Revenues, Expenses and Changes in Net Position – All Funds Combined

This statement, shown in Table 2, is presented in summary format. The accrual basis of revenues and operations and maintenance expense vary from the revenue requirement basis presented in the *Budget to Actual Analysis* and the *Wholesale Billings, Receivables & Collections* sections of the December 2018 Financial Report Binder. Prior year ending balances are provided in the June 30, 2018 column as a reference for comparative purposes. Explanatory notes follow this statement.

**Table 2 – Statement of Revenues, Expenses and Changes in Net Position
– All Funds Combined
For the Six Months ended December 31, 2018**

	Water	Percent of Revenue	Sewage Disposal	Percent of Revenue	Total Business- type Activities	Comparative June 30, 2018
Revenue						
Wholesale customer charges	\$ 165,079,000	94.2%	\$ 137,477,000	58.0%	\$ 302,555,000	\$ 592,096,000
Local system charges	10,163,000	5.8%	91,504,000	38.6%	101,667,000	194,100,000
Industrial waste charges	-		4,608,000	1.9%	4,608,000	14,335,000
Other revenue	25,000	0.0%	267,000	0.1%	292,000	4,455,000
Pollutant surcharges	-		3,012,000	1.3%	3,012,000	6,908,000
Bad Debt Recovery	-		-		-	-
Total Revenues	\$ 175,267,000	100.0%	\$ 236,867,000	100.0%	\$ 412,134,000	\$ 811,895,000
Operating Expenses						
Operations and Maintenance Expenses	58,671,000	33.5%	85,871,000	36.3%	144,541,000	284,910,000
Depreciation	73,193,000	41.8%	89,700,000	37.9%	162,893,000	331,242,000
Total Operating Expenses	131,864,000	75.2%	175,571,000	74.1%	307,434,000	616,152,000
Operating Income	43,403,000	24.8%	61,297,000	25.8%	104,700,000	195,743,000
Total Nonoperating (Revenue)/Expense	43,580,000	24.9%	59,286,000	25.0%	102,866,000	271,662,000
Increase/(Decrease) in Net Position	(177,000)	(0.1%)	2,010,000	0.8%	1,834,000	(75,920,000)
Net Position Deficit, Beginning of year	(60,435,000)		(118,319,000)		(178,755,000)	(102,835,000)
Net Position Deficit, End of Year	\$ (60,612,000)		\$(116,309,000)		\$ (176,921,000)	\$ (178,755,000)

Totals may be off due to rounding.

Water Fund

- ✓ The decrease in Water Fund Net Position is \$177 thousand.
- ✓ Wholesale water customer charges of \$165.0 million account for 94.2% of Water System revenues.
- ✓ Operating expenses of \$131.8 million represent 75.2% of total operating revenue. Depreciation is the largest operating expense at \$73.1 million or 55.5% of operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$43.4 million or 24.8% of operating revenue. This represents an increase of \$7.5 million over November year-to-date.
- ✓ The largest category within nonoperating activities is interest expense of \$57.2 million.

Sewage Disposal Fund

- ✓ The increase in Sewer Net Position was \$2.0 million.
- ✓ Wholesale customer charges of \$137.4 million account for 58.0% of Sewer System revenues. Wholesale customer charges are billed one-twelfth each month based on an agreed-upon historical average “share” of each customer’s historical flows which are formally revisited on a periodic basis. The result is no revenue shortfall or overestimation.
- ✓ Local system (DWSD) charges of \$91.5 million account for 38.6% of total operating revenues. These are also billed at one-twelfth of the annual revenue requirement.
- ✓ Operating expenses of \$175.5 million represent 74.1% of total operating revenue. Depreciation is the largest operating expense at \$89.7 million or 51.1% of total operating expense.
- ✓ Operating income after operating expenses (including depreciation) equals \$61.3 million or 25.8% of operating revenue. This represents an increase of \$4 million over November year-to-date.
- ✓ The largest category within nonoperating activities is interest expense of \$72.2 million.

Supplemental Schedule of Operations & Maintenance Expenses - All Funds Combined

This Supplemental Schedule of Operations & Maintenance Expenses (O&M) schedule is shown on the next page in Table 3. The accrual basis of operations and maintenance expense may vary from the revenue requirement basis presented in the *Budget to Actual Analysis* section of the December 2018 Financial Report Binder. Explanatory notes follow this schedule.

**Table 3 – Supplemental Schedule of Operations & Maintenance Expenses
- All Funds Combined
For the Six Months ended December 31, 2018**

Expenditure	Water	Percent of Total	Sewage Disposal System	Percent of Total	Total Business- type Activities	Percent of Total
Personnel						
Salaries & Wages	\$ 11,781,000	20.1%	\$ 22,336,000	26.0%	\$ 34,116,000	23.6%
Overtime	2,098,000	3.6%	1,663,000	1.9%	3,761,000	2.6%
Benefits	6,412,000	10.9%	4,828,000	5.6%	11,240,000	7.8%
Total Personnel	20,291,000	34.6%	28,827,000	33.6%	49,118,000	34.0%
Utilities						
Electric	14,062,000	24.0%	6,891,000	8.0%	20,953,000	14.5%
Gas	116,000	0.2%	2,584,000	3.0%	2,700,000	1.9%
Sewage	285,000	0.5%	751,000	0.9%	1,036,000	0.7%
Water	1,000	0.0%	2,085,000	2.4%	2,085,000	1.4%
Total Utilities	14,464,000	24.7%	12,310,000	14.3%	26,774,000	18.5%
Chemicals	2,696,000	4.6%	4,016,000	4.7%	6,712,000	4.6%
Supplies and other	4,656,000	7.9%	9,575,000	11.2%	14,231,000	9.8%
Contractual services	21,851,000	37.2%	31,963,000	37.2%	53,815,000	37.2%
Capital program allocation	(965,000)	-1.6%	(606,000)	-0.7%	(1,571,000)	-1.1%
Shared services allocation	(4,322,000)	-7.4%	(216,000)	-0.3%	(4,538,000)	-3.1%
Operations and Maintenance Expenses	\$ 58,671,000	100.0%	\$ 85,871,000	100.0%	\$ 144,541,000	100.0%

Totals may be off due to rounding.

- ✓ Core expenses for water and sewage disposal systems is utilities (18.5% of total O&M expenses) and chemicals (4.6%).
- ✓ Personnel (34.0%) of total O&M expenses include all salaries, wages, and benefits for employees as well as staff augmentation contracts that fill a vacant position (contractual transition services).
- ✓ Contractual services (37.2%) includes:
 - Water System costs of sludge removal and disposal services at the Northeast, Southwest and Springwells Water Treatment Plants (approximately \$4.7 million);

- Sewage Disposal System costs for the operation and maintenance of the biosolids dryer facility (approximately \$7.5 million); and
- Centralized and administrative contractual costs allocated to both systems for information technology, building maintenance, and other services.

Supplemental Schedule of Nonoperating Expenses – All Funds Combined

The Supplemental Schedule of Nonoperating Expenses – All Funds Combined is shown in Table 4. Explanatory notes follow this schedule.

**Table 4 – Supplemental Schedule of Nonoperating Expenses – All Funds Combined
For the Six Months ended December 31, 2018**

Nonoperating (Revenue)/Expense	Water	Sewage Disposal	Total Business-type Activities	Comparative June 30, 2018
Interest income contractual obligation	\$ (11,424,000)	\$ (7,509,000)	\$ (18,933,000)	\$ (38,857,000)
Investment earnings	(6,447,000)	(5,557,000)	(12,004,000)	(11,396,000)
Other nonoperating revenue (expense)	(334,000)	6,023,000	5,689,000	(430,000)
Interest expense				
Bonded debt	57,311,000	68,110,000	125,421,000	255,868,000
Lease obligation	8,860,000	10,828,000	19,688,000	39,702,000
Other obligations	2,481,000	796,000	3,277,000	4,825,000
Total interest expense	<u>68,651,000</u>	<u>79,734,000</u>	<u>148,385,000</u>	<u>300,395,000</u>
Other nonoperating expense	716,000	1,135,000	1,851,000	1,684,000
Amortization, issuance costs, debt	(3,351,000)	(3,776,000)	(7,126,000)	(8,684,000)
Amortization, raw water rights	1,783,000	-	1,783,000	2,081,000
(Gain) loss on disposal of capital assets	-	-	-	(2,463,000)
Loss on impairment of capital assets	-	-	-	654,000
Water Residential Assistance Program	-	-	-	3,756,000
Legacy pension expense (income)	<u>(6,014,000)</u>	<u>(10,764,000)</u>	<u>(16,778,000)</u>	<u>24,922,000</u>
Total Nonoperating (Revenue)/Expense	<u>\$ 43,580,000</u>	<u>\$ 59,286,000</u>	<u>\$ 102,866,000</u>	<u>\$ 271,662,000</u>

Totals may be off due to rounding.

- ✓ Interest expense, the largest category of nonoperating expenses, is due to three sources below:
 - Bonded debt;
 - Lease obligation for the regional assets from the City of Detroit; and
 - Other obligations such as an obligation payable to the City of Detroit for an allocation BC Notes related to assumed DWSD liabilities; acquisition of raw water rights related to KWA Pipeline.
- ✓ Interest income on contractual obligation relates to the portion of the total GLWA debt obligation attributable to DWSD. This interest income offsets the total debt interest expense paid by GLWA on behalf of both entities monthly.
- ✓ Investment earnings are expected to increase materially from the prior year due to the implementation of an active investment management strategy during the current fiscal year.
- ✓ Investment earnings in this report are reflected on a cost basis and may therefore not agree with the *Cash and Investment Income* section of the December 2018 Financial Report Binder and the *Quarterly Debt Report* which present balances at market value.

- ✓ Legacy Pension expense for FY 2019 is currently being calculated as income due to changes in actuarial assumptions and rates from the June 30, 2018 City of Detroit General Retirement System Component II audited financial statement.
- ✓ Sewer Other Non-operating expense includes the 2018 Memorandum of Understanding (MOU) Item 8 a from June 27, 2018 for a final bad debt lookback adjustment for DWSD of \$6.5 million.

Financial Activity Charts

Chart 1 – Capital Outlay – Water and Sewer System Combined

Capital Outlay represents purchases of equipment, software, and small facility improvement projects. It *excludes* any capital investment which is included in the monthly construction work-in-progress report related to the Capital Improvement Program.

Through December 31, 2018, the capital outlay spend is \$8.7 million. This includes underground storage tanks, dispenser and management system (\$1.5M); grit crane (\$500k); chiller replacement at Water Resource Recovery Facility (\$500k); software (\$400k); low voltage wiring (\$300k); booster pump and expansion tank for Scum building (\$200k); filter upgrade at Water Works Park (\$100k); ozone orbispheres (\$100k); and a water blasting machine (\$80k).

Some items span several months so the entire cost may not have been incurred yet. In addition, items are capitalized only if they meet GLWA’s capitalization policy.

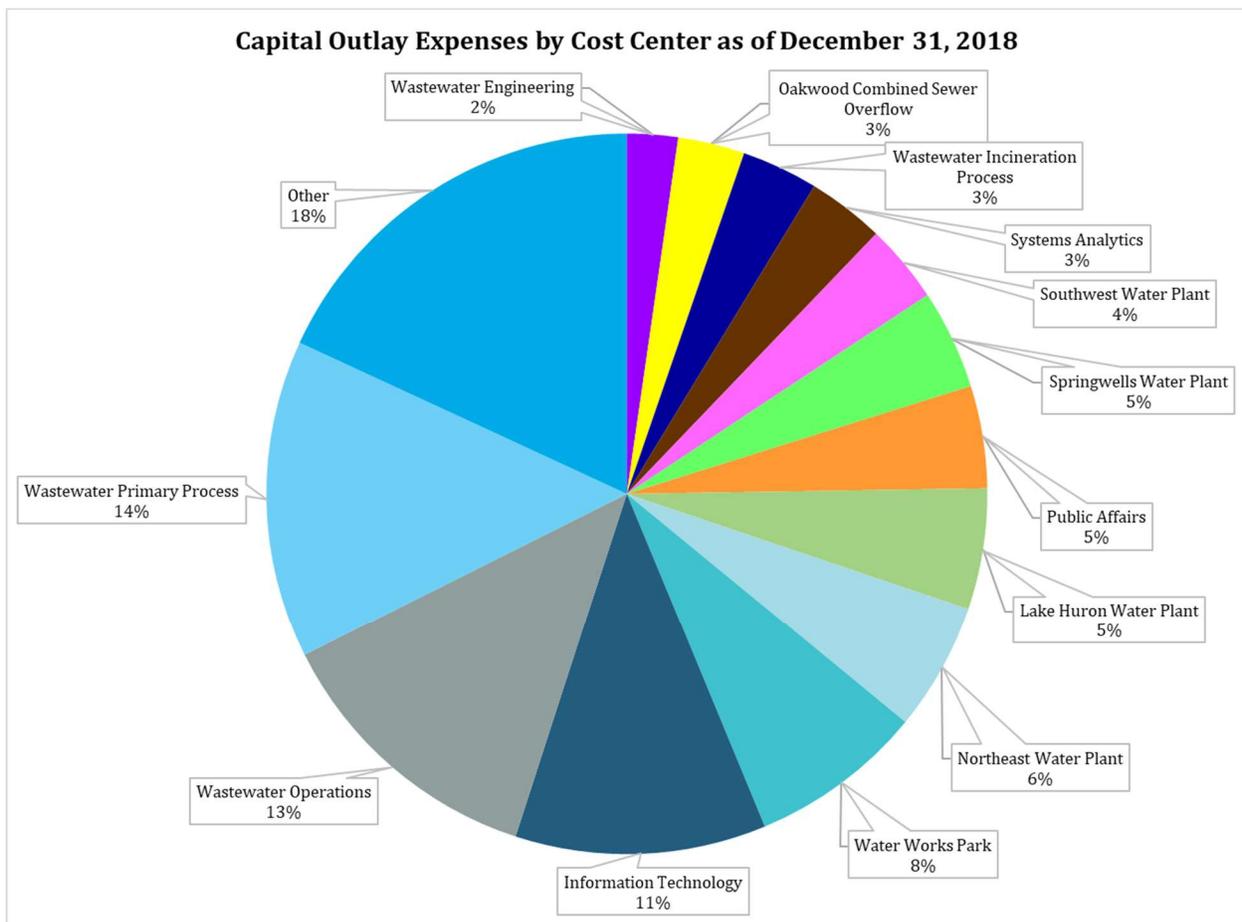
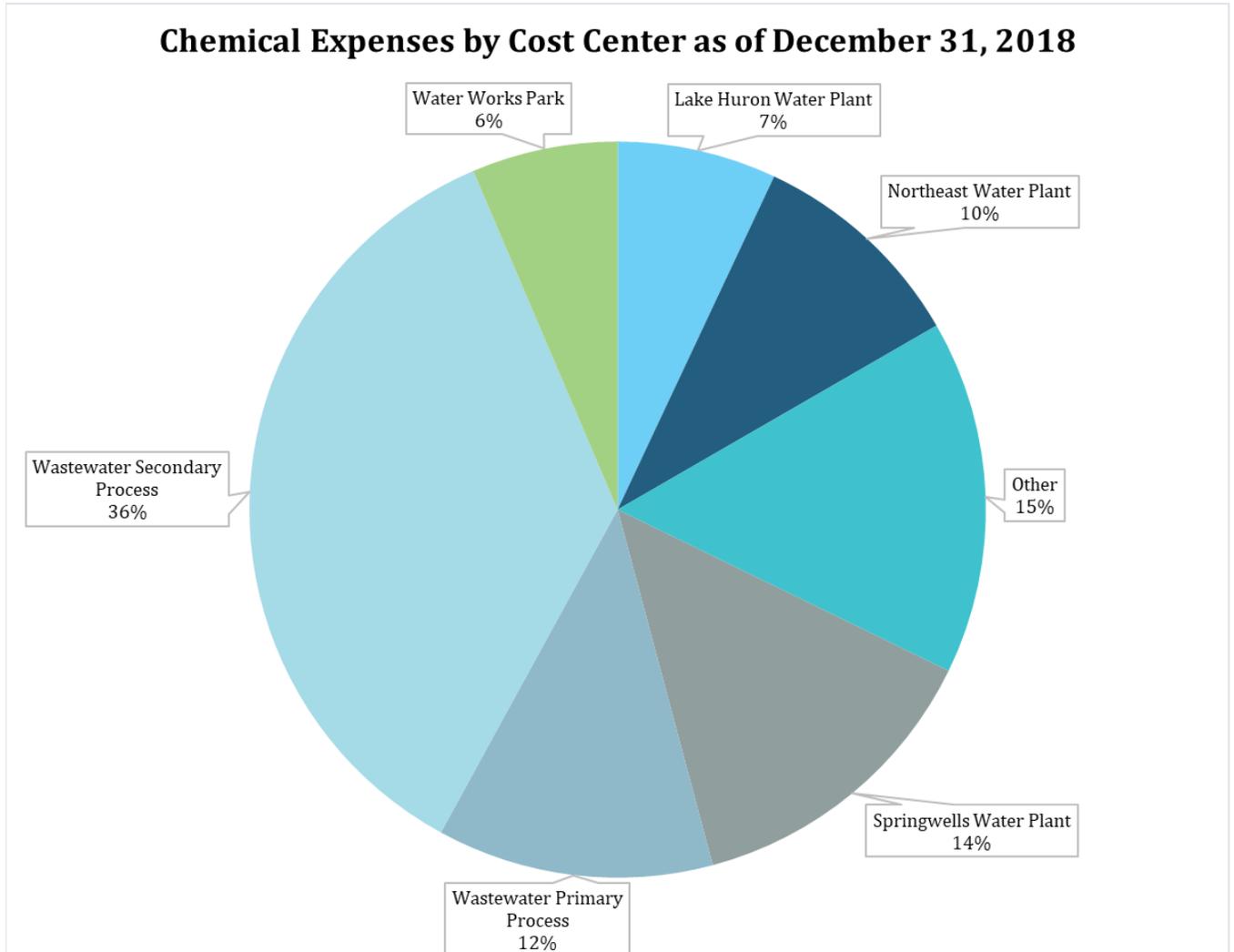


Chart 2 – Chemical Spend

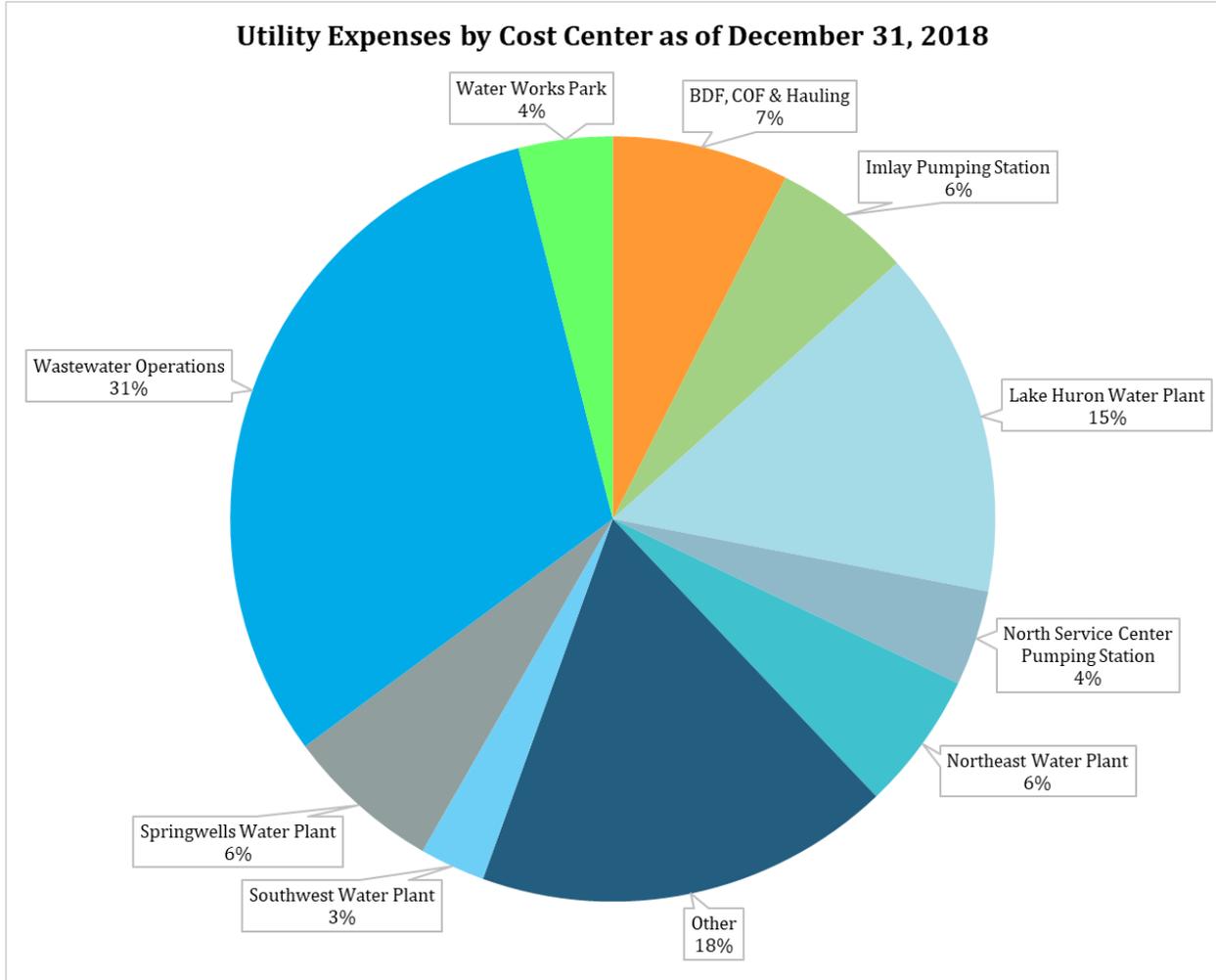
Chemical spend is \$6.7 million through December 31, 2018. The allocation is shown in the chart below.



Note: "Other" includes Combined Sewer Overflow (CSO), portions of the Wastewater process and two departments from Water.

Chart 3 – Utility Spend

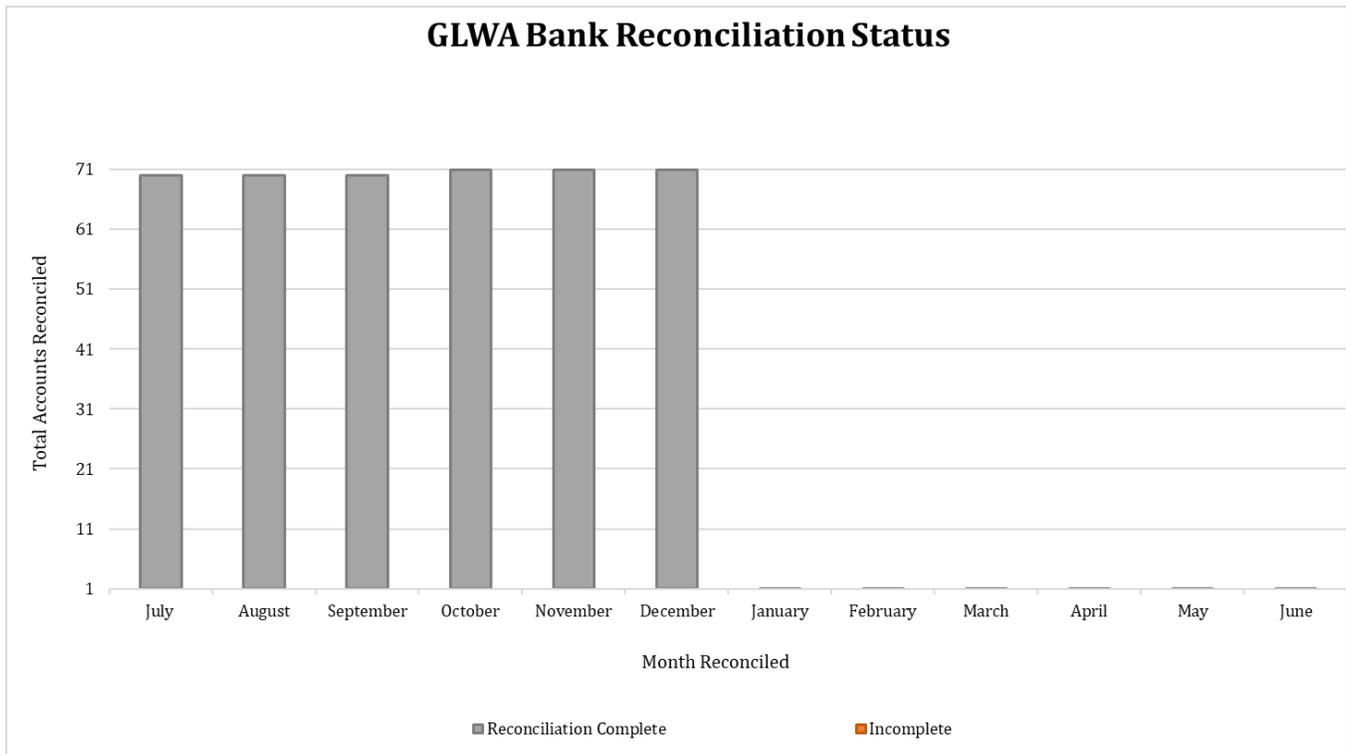
Utility spend is \$26.7 million through December 31, 2018. The allocation is shown in the chart below.



Financial Operations KPI

This key performance indicator shown in Chart 1 below provides a measure of the progress made in the month-end close process which includes bank reconciliations with a completed status at month end.

Chart 1 – Bank Reconciliation Completion Status



The Monthly Construction Work in Progress (CWIP) Summary includes the following.

1. Water System Construction Work in Progress costs incurred to date
2. Sewer System Construction Work in Progress costs incurred to date

Construction Work in Progress

Great Lakes Water Authority (GLWA) capital improvement projects generally span two or more years due to size and complexity. Therefore, the GLWA Board of Directors adopts a biennial budget that establishes allowable amounts for construction spending during that period to support a five-year capital improvement plan (CIP). The CIP is a five-year, rolling plan which is updated annually, reviewed, and formally adopted by the GLWA Board of Directors.

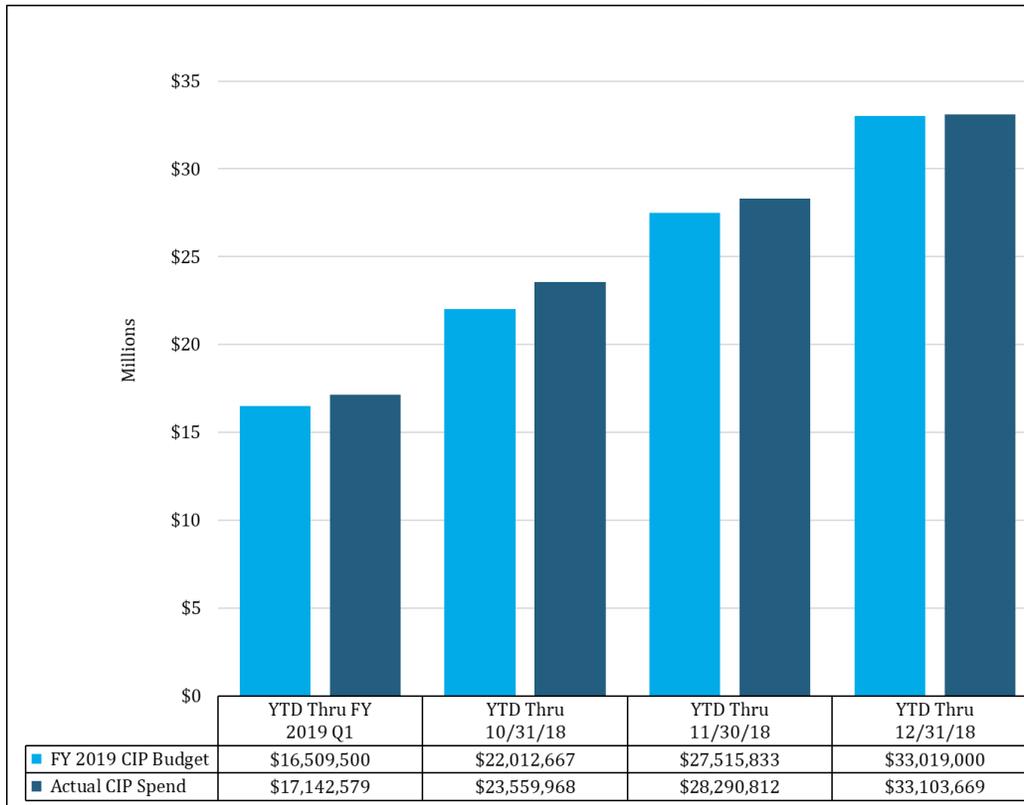
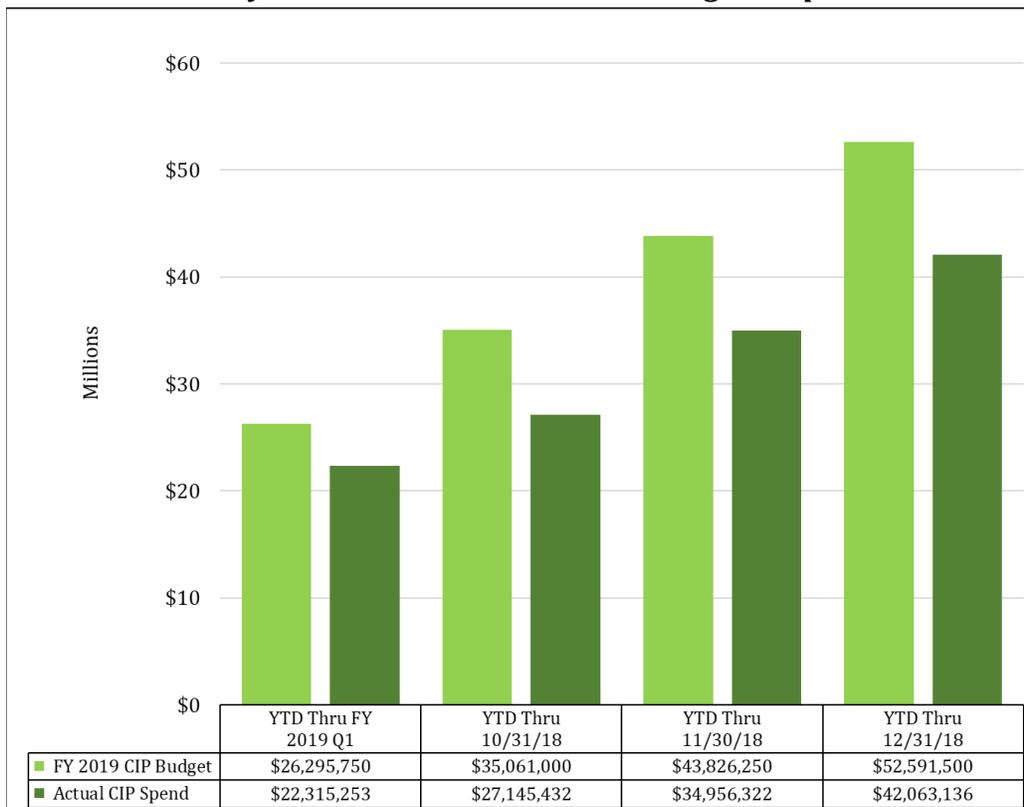
This report presents quarterly and monthly CWIP spending trends against a prorated budget amount. The prorated budget amount is calculated by dividing the total fiscal year 2019 board-approved CIP plan by twelve equal months. It should be noted that these interim reports are prepared on a modified cash basis. Known expenses, where material in nature, have been accrued.

Water System CWIP Spend

As of December 2018, the Water system incurred over \$33.1 million of construction costs to date. This is 100% of the total fiscal year 2019 prorated, budgeted spend and continues a trend of on-target spend. See Chart 1.

Sewer System CWIP Spend

As of December 2018, the Sewer system incurred over \$42 million of construction costs to date. This is 80% of the total fiscal year 2019 prorated, budgeted spend and a steady increase over the prior period. See Chart 2.

Chart 1 – Water System Construction Work in Progress Spend

Chart 2 – Sewer System Construction Work in Progress Spend


This report includes the following:

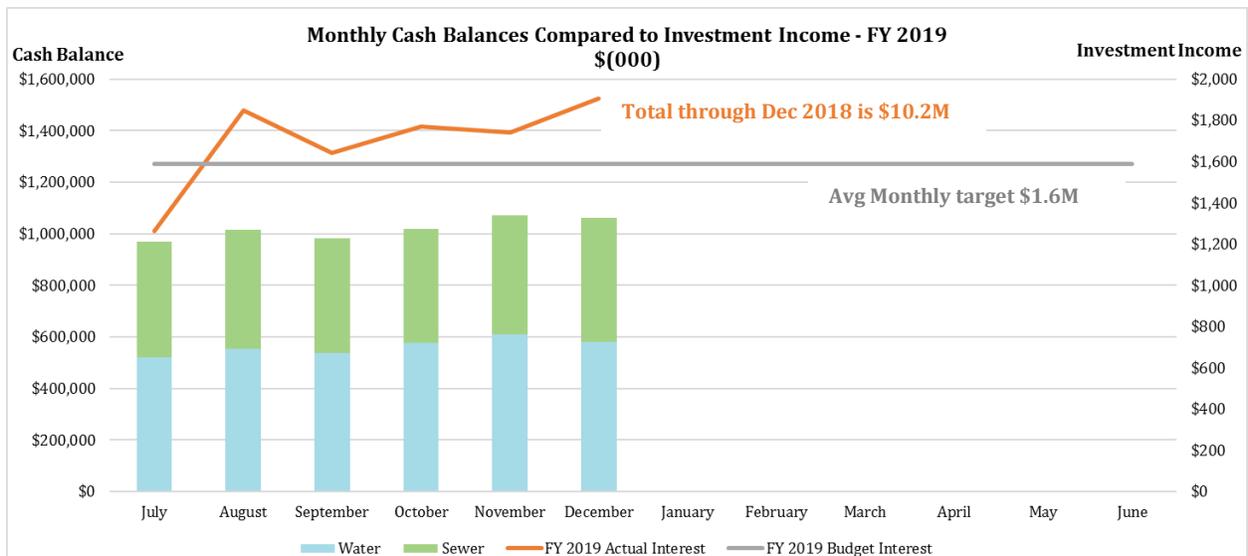
1. Monthly Cash Balances Compared to Investment Income
2. Cash Balance Detail

Monthly Cash Balances Compared to Investment Income

GLWA's investment holdings comply with the requirements of Public Act 20 of 1948, as amended and the GLWA Investment Policy. The cash balances shown in this report include bank deposits, money market funds, a local government investment pool, U.S. Treasuries, Federal Agencies, and commercial paper.

Cash and investment balances change each month based on Master Bond Ordinance (MBO) funding requirements, operational needs, capital spending pace, and mandatory debt payments. Investment income fluctuates monthly based on cash and investment balances as well as market conditions and investment strategy. The cumulative investment earnings through December 2018 of \$10.2 million is 54% of the FY 2019 budget. Based on these earnings to date, GLWA is on target to meet the projection of \$19.0 million for the fiscal year (Chart 1).

Chart 1 - Monthly Cash Balances Compared to Investment Income - Through December 31, 2018.



\$(000)	July	August	September	October	November	December	January	February	March	April	May	June
Water	\$520,662	\$553,350	\$538,774	\$578,580	\$611,387	\$579,287						
Sewer	447,079	462,096	444,994	439,564	459,228	481,025						
Total	\$967,740	\$1,015,445	\$983,768	\$1,018,144	\$1,070,616	\$1,060,313						
Investment Income	\$1,264	\$1,849	\$1,640	\$1,769	\$1,742	\$1,904						

Cash Balance Detail

Funds Held By GLWA: GLWA cash balances are held in accounts as defined by the Master Bond Ordinance. The accounts are funded by monthly transfers, as stipulated in the MBO, on the first business day of each month. The “operations and maintenance” (O&M) fund transfer amounts are based upon the annual O&M budget approved by the GLWA Board of Directors for the regional systems and by the Board of Water Commissioners for the Detroit Water & Sewerage Department (DWSD) local system budgets. The water and sewer funds held by GLWA and their purpose, as defined by the MBO, are listed below.

Funds Held Within Trust:

- Receiving – all retail and wholesale revenues collected which are distributed in subsequent month(s)
- Debt Service – funds set aside for debt service and debt reserve requirements
- Pension Obligation – funds set aside to meet GLWA’s annual funding requirements for the legacy General Retirement System Pension Plan
- Water Residential Assistance Program (WRAP) – funds set aside to be used to provide financial assistance to qualified residents throughout the local and regional water system as directed by program guidelines
- Budget Stabilization – funds held by GLWA on behalf of DWSD that can be applied against shortfalls in retail revenues
- Emergency Repair & Replacement (ER&R) – funds set aside to pay the costs for major unanticipated repairs and replacements of the local and regional systems
- Improvement & Extension (I&E) – funds set aside to be used for the improvements, enlargements and extensions of the regional system

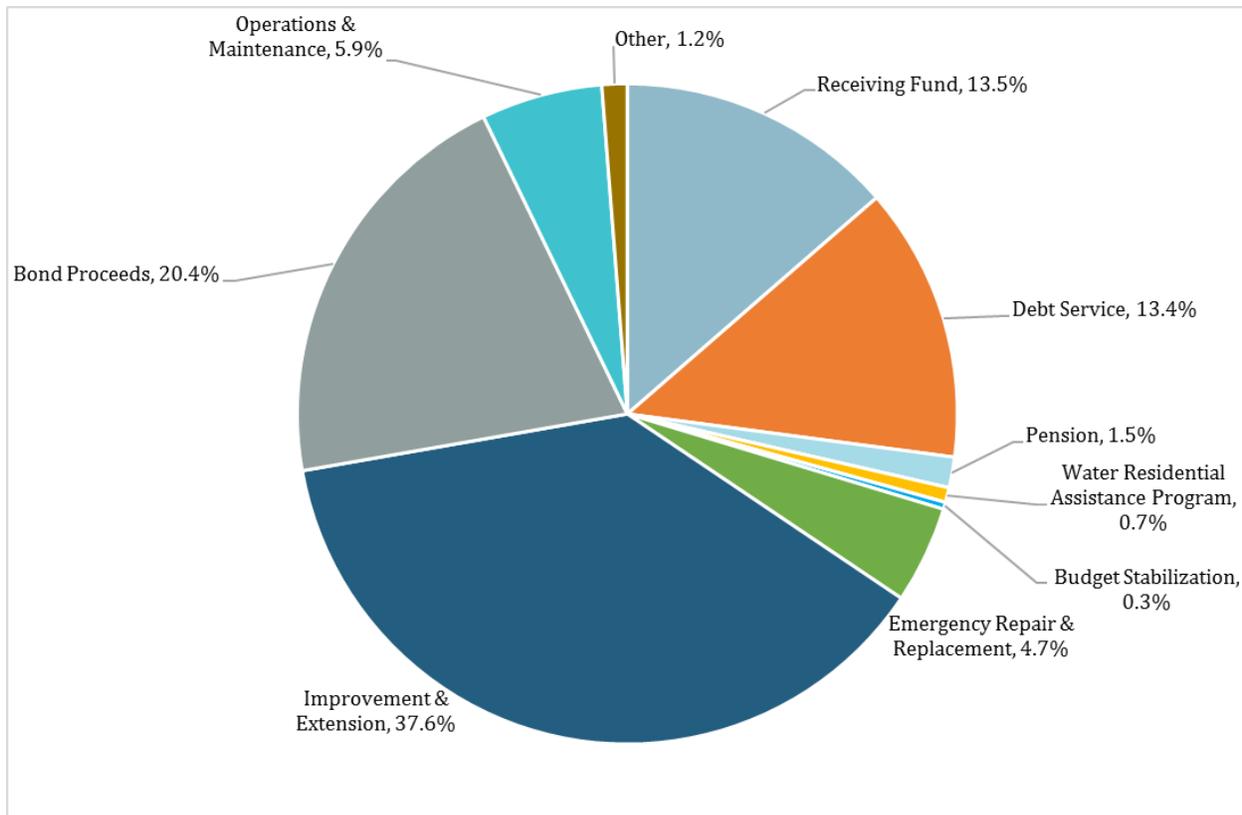
Funds Held Outside Trust:

- Bond Proceeds – funds raised from debt issuance used for costs of repairs, construction, and improvements of the regional system
- Operations & Maintenance (O&M) – funds used to meet the operational and maintenance requirements of the regional system
- Other – retainage funds held on behalf of contractors and security deposit funds held on behalf of the City of Flint

A [chart](#) depicting the follow of funds is online at glwater.org as well as the [MBO](#) documents.

Chart 2 – Cash Balances - Water Funds as of December 31, 2018

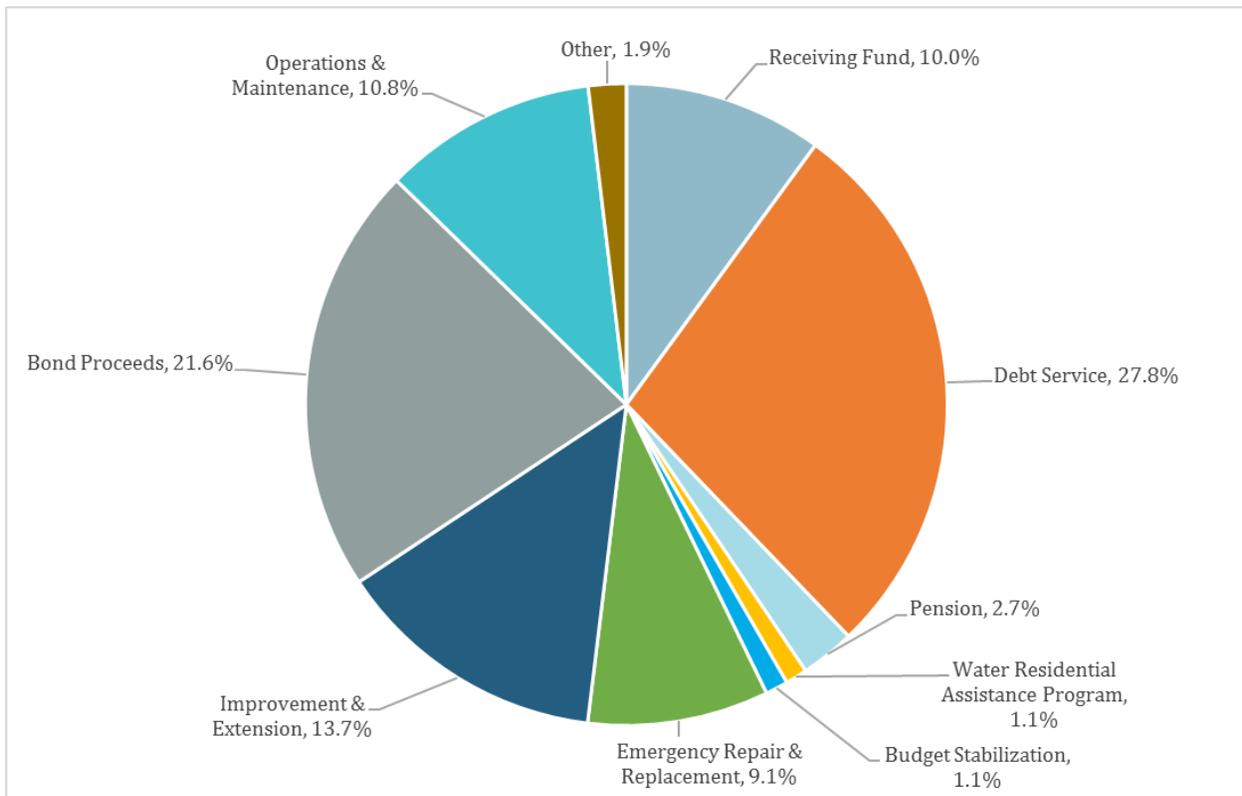
The chart below shows the allocation of the balance among the different categories defined in the section above. The total cash balance for Water Funds as of December 31, 2018 is \$579.3 million. The allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA's commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you capital funding to reduce long-term debt in the future.



Note: Due to rounding totals may not equal 100%.

Chart 3 – Cash Balances - Sewer Funds as of December 31, 2018

The chart below shows the allocation of the balance among the different funds defined in the section above. The total cash balance for Sewer Funds as of December 31, 2018 is \$481.0 million. Like the Water Funds, the allocation of balances among the I&E, bond proceeds, and debt service reserve funds reflects GLWA’s commitment to funding capital improvements and meeting debt reserve requirements while simultaneously increasing I&E resources to fund pay-as-you capital funding to reduce long-term debt in the future. The pace for Sewer Funds I&E deposits has been less than budget to address a budget shortfall over multiple years by DWSD. Beginning in February 2019, DWSD began making payments which will replenish the I&E Fund.



Note: Due to rounding totals may not equal 100%.

This report includes the following:

1. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by GLWA
2. Master Bond Ordinance (MBO) Required Transfers to Accounts Held by DWSD

MBO Required Transfers to Accounts Held by GLWA

GLWA Transfers: The Treasury Department completes required MBO transfers on the first business day of each month. Treasury completes these transfers in accordance with the Great Lakes Water Authority (GLWA) and Detroit Water & Sewerage Department (DWSD) budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually.

Monthly transfers for Operations & Maintenance (O&M), Pension, and Water Residential Assistance Program (WRAP) are one-twelfth of the annual, budgeted amount. Budget stabilization should not require additional funding due to new, baseline funding levels established as part of the April 2018 Memorandum of Understanding but is included to reflect historical activity. Treasury completes annual Extraordinary Repair & Replacement transfers as directed based on budget and year-end fund status.

Table 1 - GLWA Water Transfers reflects the required transfers for FY 2019 completed through December 3, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. Since January 1, 2016, MBO transfers for Water totaling \$433.6 million have been transferred to accounts held by GLWA. The December O&M transfer amount is less than the previous months due to correction to bring fiscal year to date transfers to the 2019 approved budget level.

Table 2 - GLWA Sewer Transfers reflects the required transfers for FY 2019 completed through December 3, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. Since January 1, 2016, MBO transfers for Sewer totaling \$669.7 million have been transferred to accounts held by GLWA. The December O&M transfer amount is less than the previous months due to correction to bring fiscal year to date transfers to the 2019 approved budget level.

Table 1 – GLWA Water Transfers

	WATER						
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$71,052,000	\$6,037,100	\$10,297,200	\$1,983,300	\$2,326,900	\$606,000	\$92,302,500
Total FY 2017	111,879,600	6,037,200	10,297,200	2,077,200	360,000	-	130,651,200
Total FY 2018	121,562,604	6,048,000	10,695,696	2,159,400	-	-	140,465,700
FY 2019							
July 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
August 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
September 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
October 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
November 2018	10,393,475	504,000	891,308	171,683	-	-	11,960,466
December 2018	8,813,927	504,000	891,308	171,683	-	-	10,380,918
Total FY 2019	60,781,302	\$3,024,000	\$5,347,848	\$1,030,098	\$0	\$0	\$70,183,248
Total Water Since Jan 1 2016	\$365,275,506	\$21,146,300	\$36,637,944	\$7,249,998	\$2,686,900	\$606,000	\$433,602,648

Table 2 – GLWA Sewer Transfers

	SEWER						
	Operations & Maintenance	Pension Sub Account	Pension Obligation	WRAP	Budget Stabilization (For Benefit of DWSD)	Extraordinary Repair & Replacement (ER&R)	Total Water
Total FY 2016	\$100,865,600	\$10,838,400	\$14,025,800	\$2,523,400	\$5,591,700	\$779,600	\$134,624,500
Total FY 2017	175,858,800	10,838,400	14,026,800	2,654,400	2,654,400	-	206,032,800
Total FY 2018	191,079,396	10,824,000	14,687,496	2,760,804	-	-	219,351,696
FY 2019							
July 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
August 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
September 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
October 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
November 2018	16,093,500	902,000	1,223,958	238,483	-	-	18,457,941
December 2018	15,072,198	902,000	1,223,958	238,483	-	-	17,436,639
Total FY 2019	\$95,539,698	\$5,412,000	\$7,343,748	\$1,430,898	\$0	\$0	\$109,726,344
Total Sewer Since Jan 1 2016	\$563,343,494	\$37,912,800	\$50,083,844	\$9,369,502	\$8,246,100	\$779,600	\$669,735,340

MBO Required Transfers to Accounts Held by DWSD

DWSD Transfers: The Treasury Department completes required MBO transfers on the first business day of each month. Treasury completes these transfers in accordance with the GLWA and DWSD budgets as approved and adopted by the GLWA Board of Directors and DWSD Board of Water Commissioners annually. GLWA Public Finance communicates planned transfers in advance of the first business day of each month and GLWA Treasury sends confirmation of transfers made to DWSD Treasury.

Monthly transfers for Operations & Maintenance (O&M) and Pension are one-twelfth of the annual, budgeted amount. The annual lease payment, as stated in the Water & Sewer Lease Agreements, is \$22,500,000 for Water and \$27,500,000 for Sewer. The monthly lease transfer is one-twelfth of the amount as stated in the Lease agreements unless otherwise designated by DWSD. Per Section 3.5 of the Lease, the Lease payment may be used for (a) bond principal and interest for Local System Improvements, (b) bond principal and interest for the City's share of common-to-all System Improvements, and (c) Local System improvements.

Table 3 – DWSD Water Transfers reflects the required transfers for FY 2019 completed through December 3, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. For FY 2016, \$2,326,900 of the lease payment was directed to offset a portion of debt service. For FY 2018, a DWSD budget adjustment resulted in a reduction in the lease transfer of \$1,875,000. For FY 2019, \$3,949,200 of the lease payment will be directed to offset a portion of debt service. This offset will be recognized over the year as a reduction in the monthly transfer amount. Since January 1, 2016, MBO transfers for Water totaling \$200.1 million have been transferred to accounts held by DWSD.

Table 4 – DWSD Sewer Transfers reflects the required transfers for FY 2019 completed through December 3, 2018. The total transfers for FY 2016, FY 2017, and FY 2018 are also included to reflect historical activity. For FY 2016, \$19,991,500 of the lease payment was directed to offset a portion of debt service. For FY 2018, a DWSD budget adjustment resulted in a reduction in the lease transfer of \$9,166,664. For FY 2019, \$4,864,000 of the lease payment will be directed to offset a portion of debt service. This offset will be recognized over the year as a reduction in the monthly transfer amount. Since January 1, 2016, MBO transfers for Sewer totaling \$230.6 million have been transferred to accounts held by DWSD.

Table 3 – DWSD Water Transfers

WATER				
	Operations & <u>Maintenance</u>	<u>Pension</u>	Lease Payment <u>(I&E Fund)</u>	<u>Total Water</u>
Total FY 2016	\$ 26,185,600	\$ 4,262,700	\$ 20,173,100	\$ 50,621,400
Total FY 2017	\$ 33,596,400	\$ 4,262,400	\$ 22,500,000	\$ 60,358,800
Total FY 2018	\$ 35,059,704	\$ 4,272,000	\$ 20,625,000	\$ 59,956,704
FY 2019				
July 2018	\$ 2,957,025	\$ 356,000	\$ 1,545,900	\$ 4,858,925
August 2018	2,957,025	356,000	1,545,900	4,858,925
September 2018	2,957,025	356,000	1,545,900	4,858,925
October 2018	2,957,025	356,000	1,545,900	4,858,925
November 2018	2,957,025	356,000	1,545,900	4,858,925
December 2018	2,957,025	356,000	1,545,900	4,858,925
Total FY 2019	\$ 17,742,150	\$ 2,136,000	\$ 9,275,400	\$ 29,153,550
Total Water Since Jan 1 2016	\$ 112,583,854	\$ 14,933,100	\$ 72,573,500	\$ 200,090,454

Table 4 - DWSD Sewer Transfers

SEWER				
	<u>Operations & Maintenance</u>	<u>Pension</u>	<u>Lease Payment (I&E Fund)</u>	<u>Total Sewer</u>
Total FY 2016	\$ 19,774,300	\$ 2,861,800	\$ 7,508,500	\$ 30,144,600
Total FY 2017	\$ 41,535,600	\$ 2,862,000	\$ 27,500,000	\$ 71,897,600
Total FY 2018	\$ 60,517,992	\$ 2,856,000	\$ 18,333,336	\$ 81,707,328
FY 2019				
July 2018	\$ 5,676,792	\$ 238,000	\$ 1,886,333	\$ 7,801,125
August 2018	5,676,792	238,000	1,886,333	7,801,125
September 2018	5,676,792	238,000	1,886,333	7,801,125
October 2018	5,676,792	238,000	1,886,333	7,801,125
November 2018	5,676,792	238,000	1,886,333	7,801,125
December 2018	5,676,792	238,000	1,886,333	7,801,125
Total FY 2019	\$ 34,060,752	\$ 1,428,000	\$ 11,317,998	\$ 46,806,750
Total Sewer Since Jan 1 2016	\$ 155,888,644	\$ 10,007,800	\$ 64,659,834	\$ 230,556,278

Retail Revenues, Receivables, and Collections: Pursuant to the terms of the lease agreement between the City of Detroit and the Great Lakes Water Authority (GLWA), the Detroit Water & Sewerage Department (DWSD) serves as GLWA's agent for billing activities for the City of Detroit retail customer class. All water and sewer service collections from DWSD customers are deposited in a trust account and are administered in accordance with the GLWA Master Bond Ordinance.

The Monthly Retail Revenues, Receivables, & Collections Report includes the following.

1. DWSD Retail Water Revenue Billings and Collections
2. DWSD Retail Sewer Revenue Billings and Collections
3. DWSD Retail Water & Sewer System Accounts Receivable Aging Report

Note: Wholesale customer revenues are billed by the Great Lakes Water Authority.

DWSD Retail Water Billings and Collections

Retail Billing Basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 1 - DWSD Retail Billings shows the FY 2019 water usage and billed revenue which are provided by DWSD staff. As of December 31, 2018, the DWSD usage was at 99.85% of the budget and billed revenue was at 103.09% of budget.

DWSD Retail Water Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 2 - Retail Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.

Table 1 – DWSD Retail Water Billings

RETAIL WATER CUSTOMERS								
Month (1)	FY 2019 - Budget/Goal			FY 2019 - Actual			FY 2019 - Variance	
	Volume	Revenue	Unit Revenue	Volume	Revenue (2)	Unit Revenue	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	269,000	9,424,500	35.04	300,613	10,203,409	33.94	31,613	778,909
August	273,100	9,377,700	34.34	302,476	9,833,149	32.09	29,376	455,449
September	270,500	8,494,300	31.40	221,531	8,996,692	40.61	(48,969)	502,392
October	233,800	8,165,900	34.93	215,104	8,010,524	37.24	(18,696)	(155,376)
November	224,500	7,750,100	34.52	232,770	8,325,013	35.76	8,270	574,913
December	206,500	8,224,900	39.83	202,686	7,659,930	37.79	(3,814)	(564,970)
January	226,600	7,978,800	35.21					
February	216,400	7,980,200	36.88					
March	213,300	8,163,900	38.27					
April	223,100	7,856,900	35.22					
May	211,000	9,109,200	43.17					
June	240,200	9,063,600	37.73					
Total	2,808,000	101,590,000	36.18	1,475,180	53,028,717	35.95	(2,220)	1,591,317
Subtotals ytd	1,477,400	51,437,400	34.82	1,475,180	53,028,717	35.95	(2,220)	1,591,317
Achievement of Budget				99.85%	103.09%			

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 2 – DWSD Retail Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
January	8,066,448	6,744,162	1,322,286	19.61%
February	6,432,245	7,682,509	(1,250,265)	-16.27%
March	8,280,635	8,218,506	62,129	0.76%
April	9,226,675	6,977,199	2,249,477	32.24%
May	8,969,019	8,568,632	400,387	4.67%
June	7,940,939	7,141,568	799,371	11.19%
July	7,375,402	8,357,505	(982,103)	-11.75%
August	8,692,784	9,509,488	(816,704)	-8.59%
September	9,766,449	8,949,906	816,543	9.12%
October	9,015,400	9,528,528	(513,128)	-5.39%
November	7,938,517	8,049,328	(110,811)	-1.38%
December	7,297,698	8,265,636	(967,938)	-11.71%
Rolling, 12-Month Total	99,002,211	97,992,967		
Rolling, 12-Month Average	8,250,184	8,166,081		

DWSD Retail Sewer Billings and Collections

Retail billing basis: DWSD bills retail customers monthly. Customers are billed throughout the month in cycles based on a meter reading schedule beginning with residential accounts and ending with commercial and industrial customers.

Table 3 - DWSD Retail Sewer Billings shows the FY 2019 sewer billed revenue which are provided by DWSD staff. As of December 31, 2018, the DWSD usage was at 103.49% of the budget and billed revenue was at 98.76% of budget.

DWSD Retail Sewer Collections: The collections represent payments made by DWSD retail customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA's Master Bond Ordinance.

Table 4 - DWSD Retail Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods.

Note: DWSD is working on the additional, billings to collections rolling average report requested by the GLWA Audit Committee at the December 21, 2018 meeting. That will be included in this report when made available by DWSD.

Table 3 - DWSD Retail Sewer Billings

RETAIL SEWER CUSTOMERS						
Month (1)	FY 2019 - Budget/Goal		FY 2019 - Actual		FY 2019 - Variance	
	Volume	Revenue	Volume	Revenue (2)	Volume	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	242,100	27,423,400	273,862	27,711,606	31,762	288,206
August	244,200	27,232,200	262,525	27,263,163	18,325	30,963
September	239,600	25,367,500	221,660	25,413,790	(17,940)	46,290
October	211,000	25,177,200	205,267	24,092,209	(5,733)	(1,084,991)
November	197,600	23,861,000	205,806	24,176,849	8,206	315,849
December	182,400	25,293,500	193,791	23,787,394	11,391	(1,506,106)
January	198,600	24,852,800				
February	191,600	25,329,400				
March	191,000	25,474,500				
April	197,300	24,789,700				
May	187,300	26,205,200				
June	210,300	26,730,700				
Total	2,493,000	307,737,100	1,362,911	152,445,011	46,011	(1,909,789)
<i>Subtotals ytd</i>	<i>1,316,900</i>	<i>154,354,800</i>	<i>1,362,911</i>	<i>152,445,011</i>	<i>46,011</i>	<i>(1,909,789)</i>
<i>Achievement of Budget/Goal</i>			<i>103.49%</i>	<i>98.76%</i>		

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Retail Revenues include Miscellaneous Revenues and Penalties

Table 4 – DWSD Retail Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
January	18,308,458	16,792,983	1,515,475	9.02%
February	17,495,563	18,149,650	(654,087)	-3.60%
March	23,015,525	18,711,974	4,303,552	23.00%
April	16,159,844	17,219,106	(1,059,262)	-6.15%
May	18,341,298	20,046,357	(1,705,059)	-8.51%
June	27,591,834	18,005,548	9,586,286	53.24%
July	21,461,926	18,582,964	2,878,962	15.49%
August	21,746,714	24,263,141	(2,516,427)	-10.37%
September	23,727,505	21,320,358	2,407,147	11.29%
October	23,938,933	23,786,903	152,030	0.64%
November	20,624,039	19,485,270	1,138,769	5.84%
December	19,612,154	19,522,952	89,203	0.46%
Rolling 12-Month Total	252,023,793	235,887,205		
Rolling, 12-Month Average	21,001,983	19,657,267		

Note: June current year receipts includes \$5.06 million in annual tax lien collections.

DWSD Retail Water and Sewer Accounts Receivable Aging Report

The DWSD detailed accounts receivable aging is categorized by customer category.

Table 5 is a summary of the total, current and non-current Water and Sewer receivables by category as of December 31, 2018. This now includes pre-bifurcation receivables transferred to DWSD as part of the April 2018 Memorandum of Understanding.

Table 5 – DWSD Retail Accounts Receivable Aging Report – Water & Sewer Combined

Sales Class	# of Accounts	Avg. Balance	Accounts Receivable				Balance
			Current	> 30 Days	> 60 Days	> 180 Days	
Residential	284,540	\$ 320.18	\$ 14,016,881 15.4%	\$ 7,048,467 7.7%	\$ 17,879,698 19.6%	\$ 52,157,921 57.3%	\$ 91,102,968 100.0%
Commercial	27,611	1,168.74	8,394,911 26.0%	2,864,819 8.9%	7,390,179 22.9%	13,620,148 42.2%	32,270,058 100.0%
Industrial	4,654	3,193.31	4,762,011 32.0%	1,862,311 12.5%	2,818,623 19.0%	5,418,742 36.5%	14,861,688 100.0%
Tax Exempt Entities	6,845	1,181.27	1,580,640 19.5%	902,746 11.2%	1,189,963 14.7%	4,412,472 54.6%	8,085,821 100.0%
Government Entities	7,732	1,561.79	1,954,708 16.2%	984,814 8.2%	2,824,109 23.4%	6,312,140 52.3%	12,075,771 100.0%
Subtotal - Active Accounts	331,382	\$ 477.99	\$ 30,709,152 19.4%	\$ 13,663,158 8.6%	\$ 32,102,572 20.3%	\$ 81,921,423 51.7%	\$ 158,396,305 100.0%
Inactive Accounts	254,372	64.80	92,851 0.6%	108,547 0.7%	1,032,576 6.3%	15,248,687 92.5%	16,482,661 100.0%
Total	585,754	\$ 298.55	\$ 30,802,003 17.6%	\$ 13,771,705 7.9%	\$ 33,135,148 18.9%	\$ 97,170,110 55.6%	\$ 174,878,966 100.0%
<i>% of Total A/R</i>							
Water Fund	220,225	173.81	\$ 7,592,130	\$ 2,901,582	\$ 6,483,570	\$ 21,301,101	\$ 38,278,383
Sewer Fund	284,469	480.19	\$ 23,209,873	\$ 10,870,123	\$ 26,651,578	\$ 75,869,009	\$ 136,600,583
Total	585,754	298.55	\$ 30,802,003	\$ 13,771,705	\$ 33,135,148	\$ 97,170,110	\$ 174,878,966

The Monthly Wholesale Billings, Receivables, & Collections Report includes the following.

1. Wholesale Water Billings and Collections
2. Wholesale Sewer Billings and Collections
3. City of Highland Park Billings and Collections
4. Wholesale Water & Sewer Accounts Receivable Aging Report

Wholesale Water Billings and Collections

Wholesale Water Contracts: Great Lakes Water Authority (GLWA) provides wholesale water service to 87 member-partners through a variety of service arrangements.

Service Arrangement Type

Model Contract	81
Emergency	1
Older Contracts	<u>5</u>
Total	<u><u>87</u></u>

Note: Services are provided to the Detroit Water & Sewerage Department (DWSD) via a Water and Sewer Services Agreement (WSSA). See the “Retail Revenues, Receivables, and Collections Report” section of this monthly report.

Wholesale Water Billing Basis: Beginning with FY 2016, wholesale water charges were restructured to create a more stable revenue stream by using a historical rolling average to project customer volumes which accounts for 40% of the monthly charges and 60% of the annual customer revenue requirement as a monthly fixed charge.

Table 1 - Wholesale Water Billings shows the FY 2019 water billed usage and revenues. As of December 31, 2018, the billed usage was at 100.95% of budget and billed revenue at 100.96% of budget. Billings and usage from the City of Flint are included as they were assumed in the FY 2019 Budget.

Wholesale Water Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA’s Master Bond Ordinance.

Table 2 - Wholesale Water Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. There is little to no difference in the year-over-year comparison. However, variability in collections month-to-month are associated with timing of the billing cycle. While at times unavoidable, the GLWA billing team is identifying steps to prevent delays wherever possible.

Table 1 - FY 2019 Wholesale Water Billings Report

WHOLESALE WATER CUSTOMERS (2)								
Month (1)	FY 2019 - Budget/Goal			FY 2019 - Actual			FY 2019 - Variance	
	Volume	Revenue	Unit	Volume	Revenue	Unit	Volume	Revenue
	Mcf	\$	\$/Mcf	Mcf	\$	\$/Mcf	Mcf	\$
July	1,632,120	30,347,500	18.59	1,800,256	32,122,653	17.84	168,136	1,775,153
August	1,518,130	29,405,800	19.37	1,490,896	29,144,135	19.55	(27,234)	(261,665)
September	1,354,440	27,424,800	20.25	1,333,455	27,129,781	20.35	(20,985)	(295,019)
October	1,091,580	24,826,000	22.74	1,027,086	24,636,482	23.99	(64,494)	(189,518)
November	912,260	23,273,500	25.51	933,105	23,659,037	25.36	20,845	385,537
December	1,002,110	23,912,600	23.86	997,281	24,026,786	24.09	(4,829)	114,186
January	1,019,240	24,133,400	23.68					
February	885,170	23,021,600	26.01					
March	1,000,060	23,933,100	23.93					
April	952,450	23,568,200	24.74					
May	1,116,620	25,296,500	22.65					
June	1,557,060	29,624,900	19.03					
Total	14,041,240	308,767,900	21.99	7,582,079	160,718,875	21.20	71,439	1,528,675
Subtotals ytd	7,510,640	159,190,200	21.20	7,582,079	160,718,875	21.20	71,439	1,528,675
Achievement of Budget				100.95%	100.96%			

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Includes Revenues and Usage from the City of Flint

Table 2 - Wholesale Water Collections

Water				
Month	Current Year	Prior Year	Variance	Ratio
January	32,002,334	23,595,948	8,406,386	35.63%
February	21,352,903	25,840,517	(4,487,613)	-17.37%
March	27,715,696	28,339,011	(623,315)	-2.20%
April	18,489,754	24,583,235	(6,093,480)	-24.79%
May	30,447,581	22,312,189	8,135,392	36.46%
June	21,815,013	24,337,730	(2,522,716)	-10.37%
July	21,923,590	28,138,726	(6,215,136)	-22.09%
August	31,920,586	25,280,453	6,640,133	26.27%
September	26,037,313	26,757,992	(728,038)	-2.72%
October	27,827,722	38,336,777	(10,509,055)	-27.41%
November	29,238,260	27,261,391	1,976,869	7.25%
December	27,720,646	22,125,972	5,594,674	25.29%
Rolling 12-Month Total	316,491,399	316,909,940		
Rolling, 12-Month Average	26,374,283	26,409,162		

Wholesale Sewer Billings and Collections

Wholesale Sewer Contracts: GLWA provides wholesale sewer service to 18 member-partners via multiple service arrangements.

Service Arrangement Type	
Model Contract	11
Emergency	0
Older Contracts	<u>7</u>
Total	<u><u>18</u></u>

Note: Services are provided to the Detroit Water & Sewerage Department via a Water and Sewer Services Agreement (WSSA). See the “Retail Revenues, Receivables, and Collections Report” section of the monthly report.

Wholesale Sewer Billing Basis: Beginning in FY 2015, the “sewer rate simplification” initiative was applied which provides for a stable revenue stream and predictability for our member partners. Wholesale sewer customers are billed a fixed monthly fee based upon the annual revenue requirement.

Table 3 - Wholesale Sewer Billings shows the FY 2019 sewer billed revenue. Consistent with expectations as a result of sewer rate simplification, billed revenue is at 100.00% of budget through December 31, 2018.

Wholesale Sewer Collections: The collections represent payments made by wholesale customers. These receipts are deposited directly into a lockbox with a trustee for administration of the flow of funds defined by GLWA’s Master Bond Ordinance.

Table 4 - Wholesale Sewer Collections shows collections by month for the past 12 months compared to collections for the prior year as well as the calculated difference between the periods. The year-over-year increase is attributable to the approved rate increase.

The shift in wholesale sewer collection patterns is largely attributable to the timing of payments received from one customer. Starting in February 2018, Wayne County’s (Rouge Valley, NE Wayne and Wayne County #3) payments were received just after the first of the calendar month for one invoice (showing no collection for the previous month) and the subsequent invoice was paid in the same calendar month. This pattern has continued through December 31, 2018. At no time during this period has Wayne County been over 45 days delinquent in its sewer payments to GLWA. Given the payment amount of \$6.8 million, this produces noticeable swings in collection volumes by month.

Table 3 - FY 2019 Wholesale Sewer Billings Report

WHOLESALE SEWER CUSTOMERS						
Month (1)	FY 2019 - Budget/Goal		FY 2019 - Actual		FY 2019 - Variance	
	Volume (2)	Revenue	Volume (2)	Revenue	Volume (2)	Revenue
	Mcf	\$	Mcf	\$	Mcf	\$
July	N/A	22,912,800	N/A	22,912,800	N/A	-
August	N/A	22,912,800	N/A	22,912,800	N/A	-
September	N/A	22,912,800	N/A	22,912,800	N/A	-
October	N/A	22,912,800	N/A	22,912,800	N/A	-
November	N/A	22,912,800	N/A	22,912,800	N/A	-
December	N/A	22,912,800	N/A	22,912,800	N/A	-
January	N/A	22,912,800	N/A		N/A	
February	N/A	22,912,800	N/A		N/A	
March	N/A	22,912,800	N/A		N/A	
April	N/A	22,912,800	N/A		N/A	
May	N/A	22,912,800	N/A		N/A	
June	N/A	22,912,800	N/A		N/A	
Total		274,953,600		137,476,800		-
<i>Subtotals ytd</i>		137,476,800		137,476,800		0
<i>Achievement of Budget</i>				100.00%		

(1) Figures are stated as "Service Months"; that is, July figures represent bills issued in August, etc.

(2) Not tracked as part of the wholesale sewer charges.

Table 4 - Wholesale Sewer Collections

Sewer				
Month	Current Year	Prior Year	Variance	Ratio
January	22,057,972	21,835,338	222,634	1.02%
February	30,280,800	21,659,900	8,620,900	39.80%
March	15,552,000	21,878,700	(6,326,700)	-28.92%
April	27,812,417	22,502,725	5,309,692	23.60%
May	15,342,700	21,620,300	(6,277,600)	-29.04%
June	28,810,500	21,645,500	7,165,000	33.10%
July	16,179,117	22,732,006	(6,552,889)	-28.83%
August	28,384,600	21,949,300	6,435,300	29.32%
September	22,672,400	21,040,913	1,631,487	7.75%
October	16,105,200	21,902,800	(5,797,600)	-26.47%
November	28,633,300	22,662,700	5,970,600	26.35%
December	24,440,000	23,643,400	796,600	3.37%
Rolling 12-Month Total	276,271,006	265,073,582		
Rolling, 12-Month Average	23,022,584	22,089,465		

City of Highland Park Billings and Collections

The City of Highland Park is provided water service pursuant to an emergency service basis. Sewer service is provided pursuant to a 1982 amended contract which indicates that the parties are guided in their legal relationship by a Michigan Supreme Court decision from 1949.

As of December 31, 2018, Highland Park had a delinquent balance of \$41.7 million, including \$33.3 million for wastewater treatment services, \$1.7 million for industrial waste control services, and \$6.7 million for water supply services.

Table 5 - City of Highland Park Billings and Collections provides a life-to-date balance summary of the billing and collection history for Highland Park with detail provided for fiscal year 2019 through December 31, 2018. Please note the numbers below reflect the month the billing was sent and not the month the service was provided. A life-to-date summary is provided as an appendix to this monthly financial report.

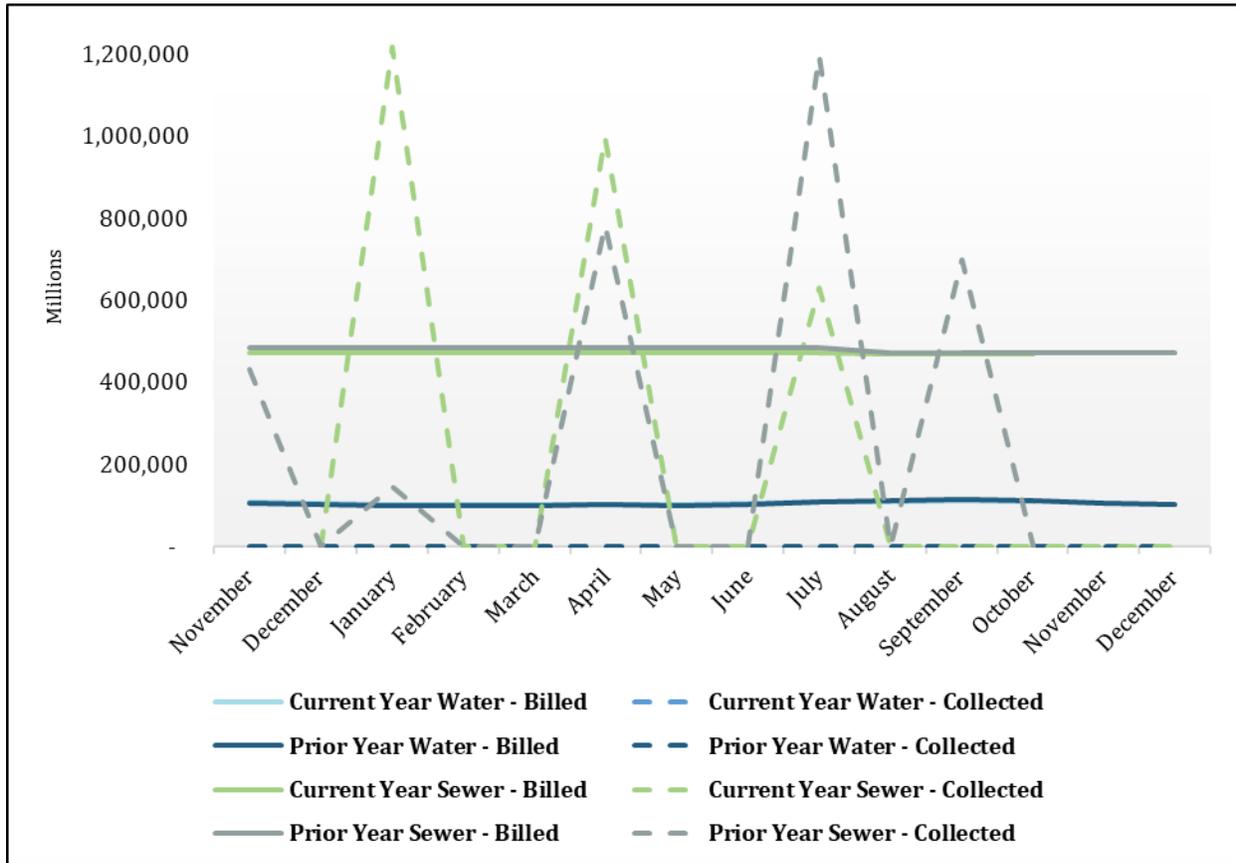
Chart 1 - City of Highland Park Billings and Collections - Past Twelve Months is provided to depict Highland Park's most current performance specific to Water and Sewer. Payments received-to-date are applied to Sewer at this time.

Table 5 - City of Highland Park Billings and Collections

City of Highland Park Billings and Payments

	Water	Sewer	IWC
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,023
July 2018 Billing	\$ 109,568	\$ 470,200	\$ 6,754
July 2018 Payments	\$ -	\$ (629,017)	\$ -
July 31, 2018 Balance	\$ 6,221,815	\$ 30,938,511	\$ 1,630,776
August 2018 Billing	\$ 108,651	\$ 467,900	\$ 4,233
August 2018 Payments	\$ -	\$ -	\$ -
August 31, 2018 Balance	\$ 6,330,467	\$ 31,406,411	\$ 1,635,009
September 2018 Billing	\$ 109,780	\$ 467,900	\$ 4,261
September 2018 Payments	\$ -	\$ -	\$ -
September 30, 2018 Balance	\$ 6,440,247	\$ 31,874,311	\$ 1,639,270
October 2018 Billing	\$ 109,298	\$ 467,900	\$ 4,281
October 2018 Payments	\$ -	\$ -	\$ -
October 31, 2018 Balance	\$ 6,549,545	\$ 32,342,211	\$ 1,643,551
November 2018 Billing	\$ 104,007	\$ 467,900	\$ 3,963
November 2018 Payments	\$ -	\$ -	\$ -
November 30, 2018 Balance	\$ 6,653,552	\$ 32,810,111	\$ 1,647,514
December 2018 Billing	\$ 101,944	\$ 467,900	\$ 3,961
December 2018 Payments	\$ -	\$ -	\$ -
December 31, 2018 Balance	\$ 6,755,496	\$ 33,278,011	\$ 1,651,474

Chart 1 - City of Highland Park Water & Sewer Billings and Collections – Past Twelve Months



Note: Current and prior year water billing amounts are very close so the two lines are nearly overlapping when reviewed at this high-level.

Wholesale Water & Sewer Accounts Receivable Aging Report

The detailed accounts receivable aging is in the Appendix to this monthly report. This report reflects the wholesale receivables only and does not include DWSD. (Note: percentages vary from 100% due to rounding.)

Table 6 - Wholesale Accounts Receivable Aging Report Summary is a summary of the total, current and non-current receivables by category as of December 31, 2018.

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park is the same summary *without* the past due balances for the City of Highland Park.

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA is a summary without the past due balances for the City of Highland Park and net of pending credits for certain Western Township Utilities Authority (WTUA). Credits for billed services are pending receipt of a final agreement from Wayne County to effectuate a transfer retroactive to July 1, 2018.

Table 6 - Wholesale Accounts Receivable Aging Report Summary

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 38,827,496.05	\$ 30,784,559.77	\$ 1,399,529.23	\$ 312,940.16	\$ 6,330,466.89
Sewer	\$ 46,902,310.28	\$ 14,092,199.50	\$ 467,900.00	\$ 467,900.00	\$ 31,874,310.78
IWC	\$ 3,063,757.66	\$ 613,916.81	\$ -	\$ 40,652.55	\$ 2,409,188.30
Pollutant Surcharge	\$ 1,181,951.19	\$ 563,657.42	\$ 61,211.29	\$ 76,757.98	\$ 480,324.50
Total	\$ 89,975,515.18	\$ 46,054,333.50	\$ 1,928,640.52	\$ 898,250.69	\$ 41,094,290.47
	100.00%	51.19%	2.14%	1.00%	45.67%

Table 7 - Wholesale Accounts Receivable Aging Report, Net of Highland Park

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 32,072,000.03	\$ 30,578,608.99	\$ 1,290,231.02	\$ 203,160.02	\$ -
Sewer	\$ 13,624,299.50	\$ 13,624,299.50	\$ -	\$ -	\$ -
IWC	\$ 1,412,283.26	\$ 605,993.42	\$ -	\$ 36,371.76	\$ 769,918.08
Pollutant Surcharge	\$ 1,181,951.19	\$ 563,657.42	\$ 61,211.29	\$ 76,757.98	\$ 480,324.50
Total	\$ 48,290,533.98	\$ 45,372,559.33	\$ 1,351,442.31	\$ 316,289.76	\$ 1,250,242.58
	100.00%	93.96%	2.80%	0.65%	2.59%

Table 8 - Wholesale Accounts Receivable Aging Report, Net of Highland Park and WTUA

	Total	Current	46-74 Days	75-104 Days	>105 Days
Water	\$ 32,072,000.03	\$ 30,578,608.99	\$ 1,290,231.02	\$ 203,160.02	\$ -
Sewer	\$ 13,624,299.50	\$ 13,624,299.50	\$ -	\$ -	\$ -
IWC	\$ 533,249.90	\$ 533,249.90	\$ -	\$ -	\$ -
Pollutant Surcharge	\$ 1,181,951.19	\$ 563,657.42	\$ 61,211.29	\$ 76,757.98	\$ 480,324.50
Total	\$ 47,411,500.62	\$ 45,299,815.81	\$ 1,351,442.31	\$ 279,918.00	\$ 480,324.50
	100.00%	95.55%	2.85%	0.59%	1.01%

The Monthly Trust Receipts & Disbursements Report includes the following.

1. GLWA Trust Receipts & Disbursements – Net Cash Flows and Receipts
2. DWSD Trust Receipts & Disbursements – Net Cash Flows and Receipts
3. Combined System Trust Receipts & Disbursements – Net Cash Flows

GLWA Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems. This report begins with the operational effective date of the GLWA on January 1, 2016.

Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2019 reflects six months of activity to date.

Through December 31, 2018 the water fund cash receipts exceeded MBO disbursements by 23% with a ratio of 13% since January 1, 2016. Through December 31, 2018, the sewer fund cash receipts exceeded MBO disbursements by 7% and by a ratio of 4% since January 1, 2016.

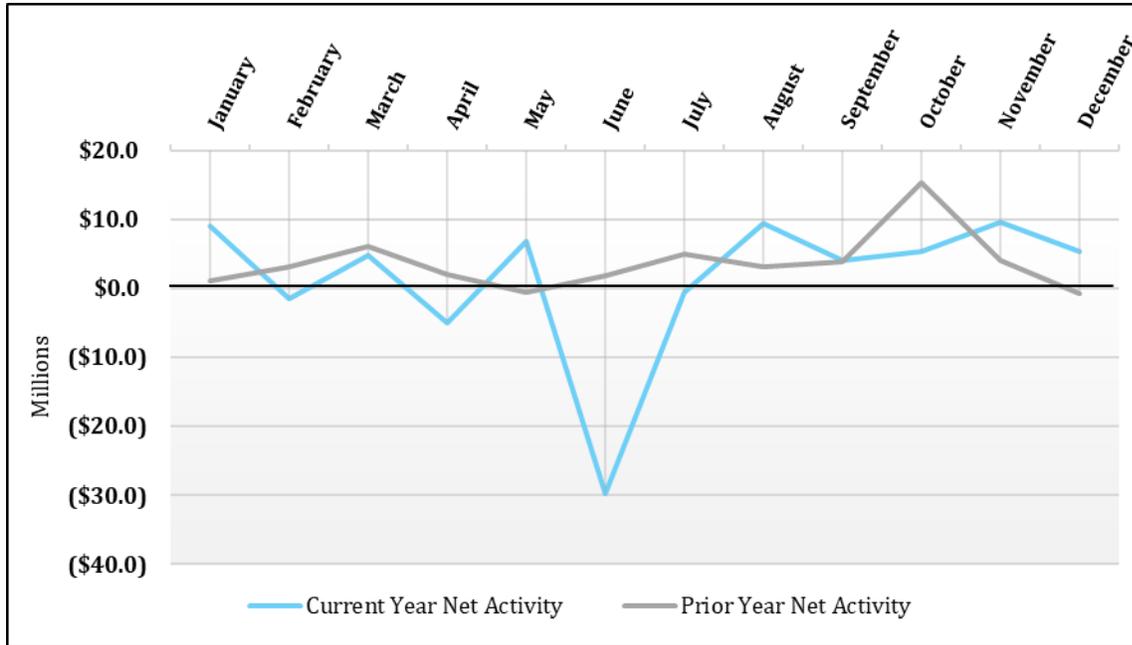
Chart 1 – GLWA 12-Month Net Receipts – Water outlines monthly cash receipt trends across two points of reference for the regional water system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

Chart 2 – GLWA 12-Month Net Receipts – Sewer outlines monthly cash receipt trends across two points of reference for the regional sewer system—current year and prior year. The black line at the zero highlights the minimum goal for net receipts.

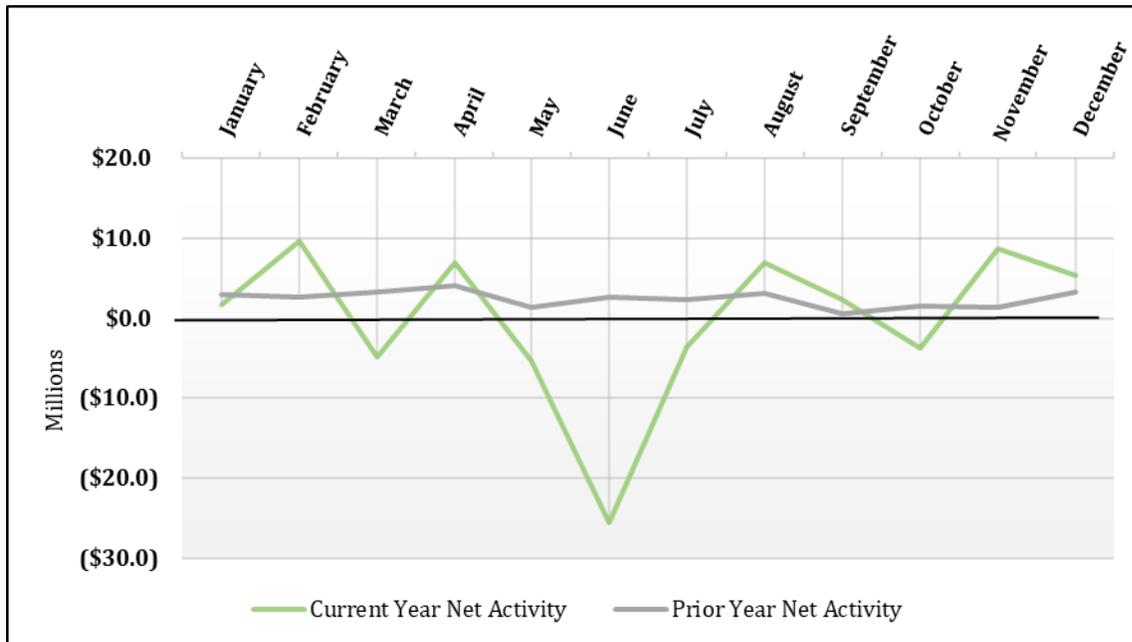
Table 1 – GLWA Net Cash Flows from Trust Receipts & Disbursements

	FY 2016	FY 2017	FY 2018	FY 2019-to-Date	Life-to-Date Total
Water					
1 Receipts	\$ 149,624,282	352,432,096	337,488,663	177,829,496	1,017,374,537
2 MOU Adjustments	-	-	-	-	-
3 Adjusted Receipts	149,624,282	352,432,096	337,488,663	177,829,496	1,017,374,537
4 Disbursements	146,191,756	288,268,172	321,841,171	144,124,297	900,425,396
5 Net Receipts	\$ 3,432,526	64,163,924	15,647,492	33,705,199	116,949,141
6 <i>Ratio of Receipts to Disbursements</i>	102%	122%	105%	123%	113%
Sewer					
7 Receipts	\$ 232,310,973	469,205,156	474,946,332	238,860,052	1,415,322,513
8 MOU Adjustments	-	-	-	-	-
9 Adjusted Receipts	232,310,973	469,205,156	474,946,332	238,860,052	1,415,322,513
10 Disbursements	219,471,583	440,859,613	480,278,006	222,882,706	1,363,491,908
11 Net Receipts	\$ 12,839,390	28,345,543	(5,331,674)	15,977,346	51,830,605
12 <i>Ratio of Receipts to Disbursements</i>	106%	106%	99%	107%	104%
Combined					
13 Receipts	\$ 381,935,255	821,637,252	812,434,995	416,689,548	2,432,697,050
14 MOU Adjustments	-	-	-	-	-
15 Adjusted Receipts	381,935,255	821,637,252	812,434,995	416,689,548	2,432,697,050
16 Disbursements	365,663,339	729,127,785	802,119,177	367,007,003	2,263,917,304
17 Net Receipts	\$ 16,271,916	92,509,467	10,315,818	49,682,545	168,779,746
18 <i>Ratio of Receipts to Disbursements</i>	104%	113%	101%	114%	107%

MOU Adjustments applies to DWSD and is shown here for consistency.

Chart 1 - GLWA 12-Month Net Receipts - Water


Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.

Chart 2 - GLWA 12-Month Net Receipts - Sewer


Note: June 2018 net activity reflects a year-end improvement and extension fund transfer.

DWSD Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

This report provides an ongoing status of the net cash flow of both organizations (GLWA and DWSD) to fund their allocated share of Master Bond Ordinance requirements in accordance with the leases for the regional systems. This report begins with the operational effective date of the GLWA on January 1, 2016.

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for DWSD since inception at January 1, 2016. Fiscal year 2019 reflects six months of activity to date.

Through December 31, 2018 the local water fund cash receipts exceeded MBO disbursements by 3% with a historical ratio of cash receipts exceeding MBO disbursements at 4% since January 1, 2016.

Through December 31, 2018, the local sewer fund cash receipts fell short of MBO disbursements by -2% with a historic shortfall of -6% since January 1, 2016. FY 2019 activity to date reflects a \$6.5 million sewer lookback adjustment completed in December 2018. This was due from GLWA to DWSD as part of the April 2018 MOU.

The Reconciliation Committee also monitors this balance as part of its quarterly meetings and formal repayment terms for recommendation to the GLWA Board of Directors are currently under discussion.

Chart 3 – DWSD 12-Month Net Receipts – Water outlines monthly activity trends across two points of reference for the local water system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.

Chart 4 – DWSD 12-Month Net Receipts – Sewer outlines monthly activity trends across two points of reference for the local sewer system—current year and prior year. The black line at the zero highlights the breakeven goal for net receipts.

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements

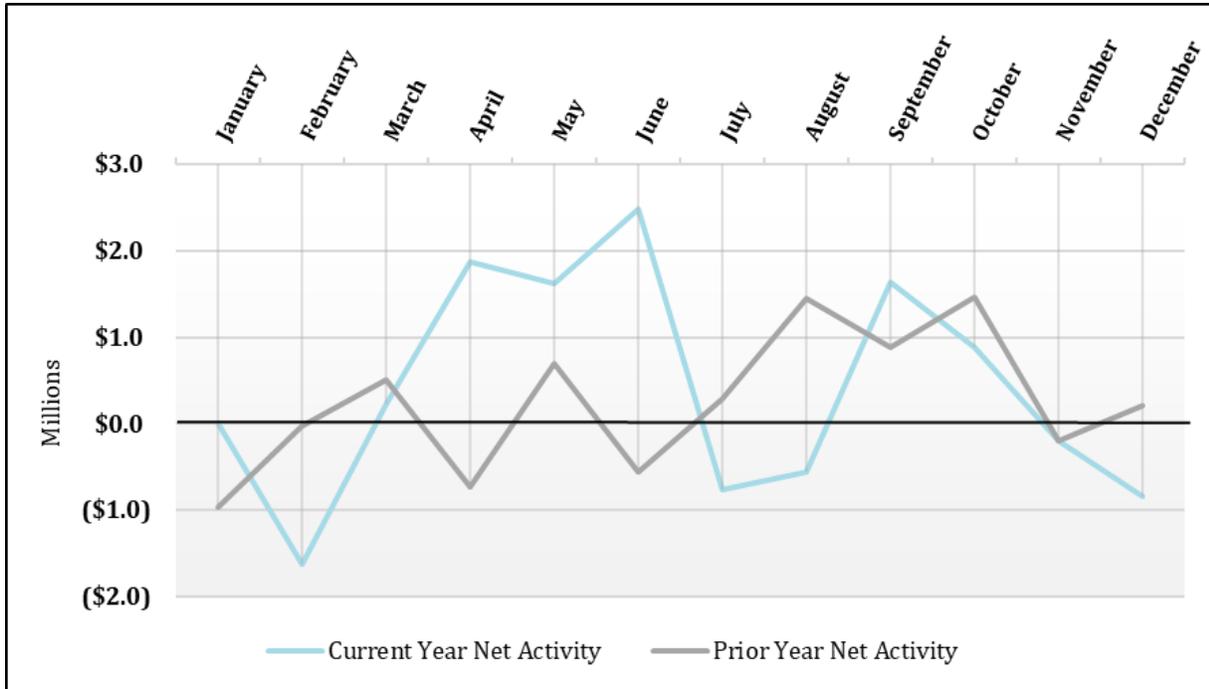
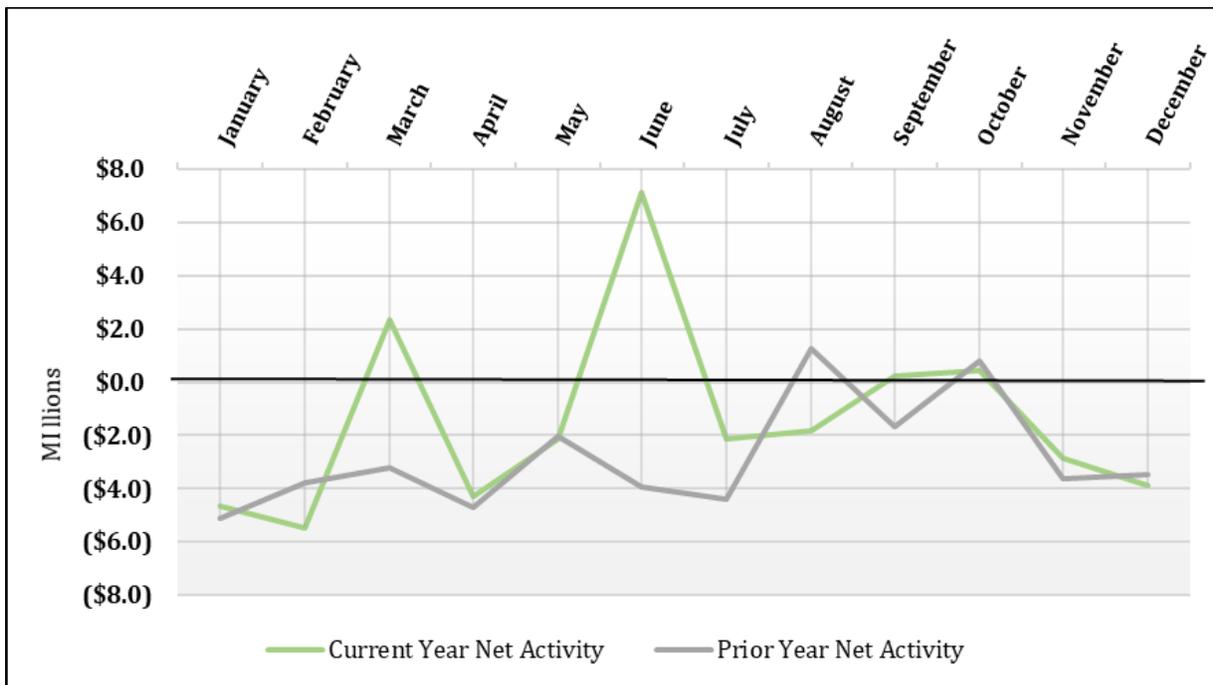
	FY 2016	FY 2017	FY 2018	FY 2019-to-Date	Life-to-Date Total
Water					
1 Receipts	\$ 26,201,881	96,451,105	101,716,017	50,119,222	274,488,225
2 MOU Adjustments	18,446,100	-	-	-	18,446,100
3 Adjusted Receipts	44,647,981	96,451,105	101,716,017	50,119,222	292,934,325
4 Disbursements	47,809,552	93,066,144	93,049,457	48,847,350	282,772,503
5 Net Receipts	\$ (3,161,571)	3,384,961	8,666,560	1,271,872	10,161,822
6 Ratio of Receipts to Disbursements	93%	104%	109%	103%	104%
Sewer					
7 Receipts	\$ 65,256,734	233,723,367	247,975,470	131,272,051	678,227,622
8 MOU Adjustments	55,755,100	-	-	6,527,200	62,282,300
9 Adjusted Receipts	121,011,834	233,723,367	247,975,470	137,799,251	740,509,922
10 Disbursements	122,297,300	261,963,973	266,217,825	141,271,772	791,750,870
11 Net Receipts	\$ (1,285,466)	(28,240,606)	(18,242,355)	(3,472,521)	(51,240,948)
12 Ratio of Receipts to Disbursements	99%	89%	93%	98%	94%
Combined					
13 Receipts	\$ 91,458,615	330,174,472	349,691,487	181,391,273	952,715,847
14 MOU Adjustments	74,201,200	-	-	6,527,200	80,728,400
15 Adjusted Receipts	165,659,815	330,174,472	349,691,487	187,918,473	1,033,444,247
16 Disbursements	170,106,852	355,030,117	359,267,282	190,119,122	1,074,523,373
17 Net Receipts	\$ (4,447,037)	(24,855,645)	(9,575,795)	(2,200,649)	(41,079,126)
18 Ratio of Receipts to Disbursements	97%	93%	97%	99%	96%

Note 1: The \$29,300,000 for the DWSD loan receivable balance is calculated as follows.

(1,285,466)	FY 2016 Shortfall
(28,240,606)	FY 2017 Shortfall
(29,526,072)	Subtotal
238,264	June IWC not due until July
(29,287,808)	FY 2017 Shortfall-to-Date

29,300,000 FY 2017 Shortfall-to-Date, Rounded

Note 2: During the preparation of this report DWSD made payments totaling approximately \$7 million in principal towards this loan receivable balance. This payment activity will be reflected in the February 2019 TRD report.

Chart 3 – DWSD 12-Month Net Receipts - Water

Chart 4 – DWSD 12-Month Net Receipts - Sewer


Combined System Trust Receipts & Disbursements

Net Cash Flows and Receipts Basis: The trusts established pursuant to the Master Bond Ordinance (MBO) outline a flow of funds that governs the priority of the application of cash receipts from both the regional wholesale (i.e. Great Lakes Water Authority or GLWA) and local retail (i.e. Detroit Water & Sewerage Department or DWSD) activities which are further separated by the water system and the sewage disposal system.

Table 3 – Combined Net Cash Flows from Trust Receipts & Disbursements provides a summary of cash receipt collections and required MBO transfers by fiscal year as well as a total of all activity for GLWA since inception at January 1, 2016. Fiscal year 2019 reflects six months of activity to date.

Through December 31, 2018 the combined water system cash receipts exceeded MBO disbursements by 18% with a ratio of 11% since January 1, 2016. Through December 31, 2018, the combined sewer system cash receipts exceeded MBO disbursements by 3% and is functioning at a breakeven status since January 1, 2016.

Table 3 – Combined Net Cash Flows from Trust Receipts & Disbursements

	FY 2016	FY 2017	FY 2018	FY 2019-to-Date	Life-to-Date Total
Water					
1 Receipts	\$ 175,826,163	\$ 448,883,201	\$ 439,204,680	\$ 227,948,718	1,291,862,762
2 MOU Adjustments	\$ 18,446,100	\$ -	\$ -	\$ -	18,446,100
3 Adjusted Receipts	194,272,263	448,883,201	439,204,680	227,948,718	1,310,308,862
4 Disbursements	194,001,308	381,334,316	414,890,628	192,971,647	1,183,197,899
5 Net Receipts	\$ 270,955	67,548,885	24,314,052	34,977,071	127,110,963
6 <i>Ratio of Receipts to Disbursements</i>	100%	118%	106%	118%	111%
Sewer					
7 Receipts	\$ 297,567,707	\$ 702,928,523	\$ 722,921,802	\$ 370,132,103	2,093,550,135
8 MOU Adjustments	\$ 55,755,100	\$ -	\$ -	\$ 6,527,200	62,282,300
9 Adjusted Receipts	353,322,807	702,928,523	722,921,802	376,659,303	2,155,832,435
10 Disbursements	341,768,883	702,823,586	746,495,831	364,154,478	2,155,242,778
11 Net Receipts	\$ 11,553,924	\$ 104,937	\$ (23,574,029)	\$ 12,504,825	589,657
12 <i>Ratio of Receipts to Disbursements</i>	103%	100%	97%	103%	100%
Combined					
13 Receipts	\$ 473,393,870	\$ 1,151,811,724	\$ 1,162,126,482	\$ 598,080,821	3,385,412,897
14 MOU Adjustments	\$ 74,201,200	\$ -	\$ -	\$ 6,527,200	80,728,400
15 Adjusted Receipts	547,595,070	1,151,811,724	1,162,126,482	604,608,021	3,466,141,297
16 Disbursements	535,770,191	1,084,157,902	1,161,386,459	557,126,125	3,338,440,677
17 Net Receipts	\$ 11,824,879	\$ 67,653,822	\$ 740,023	\$ 47,481,896	127,700,620
18 <i>Ratio of Receipts to Disbursements</i>	102%	106%	100%	109%	104%

APPENDIX

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$173,702.18	\$173,702.18	\$0.00	\$0.00	\$0.00
ASH TOWNSHIP	\$194,387.75	\$128,195.81	\$66,191.94	\$0.00	\$0.00
BELLEVILLE	\$25,202.23	\$25,202.23	\$0.00	\$0.00	\$0.00
BERLIN TOWNSHIP	\$57,162.45	\$57,162.45	\$0.00	\$0.00	\$0.00
BROWNSTOWN TOWNSHIP	\$280,013.19	\$280,013.19	\$0.00	\$0.00	\$0.00
BRUCE TOWNSHIP	\$28,137.75	\$28,137.75	\$0.00	\$0.00	\$0.00
BURTCHVILLE TOWNSHIP	\$21,956.64	\$21,956.64	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$749,576.26	\$749,576.26	\$0.00	\$0.00	\$0.00
CENTER LINE	\$36,534.28	\$36,534.28	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$321,383.70	\$321,383.70	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$632,796.23	\$632,796.23	\$0.00	\$0.00	\$0.00
COMMERCE TOWNSHIP	\$272,291.48	\$272,291.48	\$0.00	\$0.00	\$0.00
DEARBORN	\$2,769,217.59	\$1,815,566.03	\$953,651.56	\$0.00	\$0.00
DEARBORN HEIGHTS	\$280,113.52	\$280,113.52	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$254,040.77	\$241,492.38	\$12,548.39	\$0.00	\$0.00
ECORSE	\$128,875.29	\$128,875.29	\$0.00	\$0.00	\$0.00
FARMINGTON	\$77,583.37	\$77,583.37	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$674,868.52	\$674,868.52	\$0.00	\$0.00	\$0.00
FERNDALE	\$160,832.76	\$160,832.76	\$0.00	\$0.00	\$0.00
FLAT ROCK	\$96,848.47	\$96,848.47	\$0.00	\$0.00	\$0.00
FLINT	\$318,161.97	\$318,161.97	\$0.00	\$0.00	\$0.00
FRASER	\$92,528.99	\$92,528.99	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$133,626.18	\$133,626.18	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
GIBRALTAR	\$25,818.52	\$25,818.52	\$0.00	\$0.00	\$0.00
GREENWOOD TOWNSHIP	\$46,458.72	\$46,458.72	\$0.00	\$0.00	\$0.00
GROSSE ILE TOWNSHIP	\$212,675.68	\$212,675.68	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$99,678.91	\$99,678.91	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$46,773.02	\$46,773.02	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$120,901.05	\$120,901.05	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$59,176.14	\$59,176.14	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$65,484.54	\$65,484.54	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$117,547.21	\$117,547.21	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$57,458.17	\$57,458.17	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$6,755,496.02	\$205,950.78	\$109,298.21	\$109,780.14	\$6,330,466.89
HURON TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
IMLAY CITY	\$100,796.23	\$100,796.23	\$0.00	\$0.00	\$0.00
IMLAY TOWNSHIP	\$1,099.54	\$1,099.54	\$0.00	\$0.00	\$0.00
INKSTER	\$202,132.95	\$202,132.95	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$24,152.33	\$24,152.33	\$0.00	\$0.00	\$0.00
LAPEER	\$119,723.19	\$119,723.19	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$26,622.86	\$26,622.86	\$0.00	\$0.00	\$0.00
LINCOLN PARK	\$194,543.86	\$194,543.86	\$0.00	\$0.00	\$0.00
LIVONIA	\$1,074,666.54	\$1,074,666.54	\$0.00	\$0.00	\$0.00
MACOMB TWP	\$810,592.03	\$810,592.03	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$157,868.75	\$157,868.75	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MAYFIELD TOWNSHIP	\$5,083.06	\$5,083.06	\$0.00	\$0.00	\$0.00
MELVINDALE	\$53,851.43	\$53,851.43	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$29,787.76	\$29,787.76	\$0.00	\$0.00	\$0.00
NOCWA	\$3,679,452.29	\$3,679,452.29	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$121,101.10	\$121,101.10	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$407,009.04	\$407,009.04	\$0.00	\$0.00	\$0.00
NOVI	\$845,093.23	\$845,093.23	\$0.00	\$0.00	\$0.00
OAK PARK	\$110,236.43	\$110,236.43	\$0.00	\$0.00	\$0.00
OAKLAND CO DR COM	\$5,638.82	\$5,638.82	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$82,387.97	\$82,387.97	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$324,024.02	\$324,024.02	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$244,966.68	\$244,966.68	\$0.00	\$0.00	\$0.00
RIVER ROUGE	\$44,858.61	\$44,858.61	\$0.00	\$0.00	\$0.00
RIVERVIEW	\$72,181.37	\$72,181.37	\$0.00	\$0.00	\$0.00
ROCKWOOD	\$24,430.64	\$24,430.64	\$0.00	\$0.00	\$0.00
ROMEO	\$19,624.39	\$19,624.39	\$0.00	\$0.00	\$0.00
ROMULUS	\$331,273.58	\$331,273.58	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$212,756.49	\$212,756.49	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$17,906.15	\$17,906.15	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$1,006,766.57	\$1,006,766.57	\$0.00	\$0.00	\$0.00
SOCWA	\$3,618,473.42	\$3,618,473.42	\$0.00	\$0.00	\$0.00
SOUTH ROCKWOOD	\$8,473.76	\$8,473.76	\$0.00	\$0.00	\$0.00
SOUTHGATE	\$178,787.06	\$178,787.06	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- WATER ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ST. CLAIR SHORES	\$868,798.88	\$407,799.73	\$257,839.13	\$203,160.02	\$0.00
STERLING HEIGHTS	\$1,138,054.99	\$1,138,054.99	\$0.00	\$0.00	\$0.00
SUMPTER TOWNSHIP	\$53,821.72	\$53,821.72	\$0.00	\$0.00	\$0.00
SYLVAN LAKE	\$19,056.41	\$19,056.41	\$0.00	\$0.00	\$0.00
TAYLOR	\$709,629.30	\$709,629.30	\$0.00	\$0.00	\$0.00
TRENTON	\$171,575.88	\$171,575.88	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$1,035,282.55	\$1,035,282.55	\$0.00	\$0.00	\$0.00
UTICA	\$45,273.51	\$45,273.51	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$284,193.77	\$284,193.77	\$0.00	\$0.00	\$0.00
VILLAGE OF ALMONT	\$19,244.58	\$19,244.58	\$0.00	\$0.00	\$0.00
WALLED LAKE	\$153,354.42	\$153,354.42	\$0.00	\$0.00	\$0.00
WARREN	\$1,660,880.20	\$1,660,880.20	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$ (49,314.80)	\$ (49,314.80)	\$0.00	\$0.00	\$0.00
WAYNE	\$231,656.35	\$231,656.35	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$822,248.37	\$822,248.37	\$0.00	\$0.00	\$0.00
WESTLAND	\$1,011,126.78	\$1,011,126.78	\$0.00	\$0.00	\$0.00
WIXOM	\$184,062.64	\$184,062.64	\$0.00	\$0.00	\$0.00
WOODHAVEN	\$123,846.53	\$123,846.53	\$0.00	\$0.00	\$0.00
YCUA	\$801,032.27	\$801,032.27	\$0.00	\$0.00	\$0.00
TOTAL WATER ACCOUNTS	\$38,827,496.05	\$30,784,559.77	\$1,399,529.23	\$312,940.16	\$6,330,466.89

GLWA Aged Accounts Receivable- SEWER ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CENTER LINE	\$85,599.50	\$85,599.50	\$0.00	\$0.00	\$0.00
DEARBORN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EVERGREEN-FARMINGTON	\$2,881,500.00	\$2,881,500.00	\$0.00	\$0.00	\$0.00
FARMINGTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$74,100.00	\$74,100.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$150,100.00	\$150,100.00	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$18,200.00	\$18,200.00	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$33,278,010.78	\$467,900.00	\$467,900.00	\$467,900.00	\$31,874,310.78
MELVINDALE	\$126,900.00	\$126,900.00	\$0.00	\$0.00	\$0.00
OAKLAND COUNTY GWK DD	\$3,747,700.00	\$3,747,700.00	\$0.00	\$0.00	\$0.00
OMID	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
REDFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROUGE VALLEY	\$4,480,100.00	\$4,480,100.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY N.E.	\$2,056,000.00	\$2,056,000.00	\$0.00	\$0.00	\$0.00
WAYNE COUNTY-AREA #3	\$4,100.00	\$4,100.00	\$0.00	\$0.00	\$0.00
TOTAL SEWER ACCOUNTS	\$46,902,310.28	\$14,092,199.50	\$467,900.00	\$467,900.00	\$31,874,310.78

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
ALLEN PARK	\$1,612.35	\$1,612.35	\$0.00	\$0.00	\$0.00
AUBURN HILLS (C-O)	\$20,240.88	\$20,240.88	\$0.00	\$0.00	\$0.00
AUBURN HILLS (E-F)	\$375.19	\$375.19	\$0.00	\$0.00	\$0.00
BERKLEY	\$2,901.33	\$2,901.33	\$0.00	\$0.00	\$0.00
BEVERLY HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BINGHAM FARMS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BIRMINGHAM (SEOC)	\$11,182.78	\$11,182.78	\$0.00	\$0.00	\$0.00
BLOOMFIELD HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BLOOMFIELD TOWNSHIP	\$7,161.14	\$7,161.14	\$0.00	\$0.00	\$0.00
CANTON TOWNSHIP	\$460,738.06	\$38,132.92	\$0.00	\$19,066.46	\$403,538.68
CENTER LINE	\$3,683.10	\$3,683.10	\$0.00	\$0.00	\$0.00
CHESTERFIELD TOWNSHIP	\$12,179.14	\$12,179.14	\$0.00	\$0.00	\$0.00
CITY OF FARMINGTON (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CITY OF FERNDALE	\$14,228.40	\$14,228.40	\$0.00	\$0.00	\$0.00
CITY OF ROCHESTER	\$3,725.23	\$3,725.23	\$0.00	\$0.00	\$0.00
CLARKSTON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CLAWSON	\$2,763.45	\$2,763.45	\$0.00	\$0.00	\$0.00
CLINTON TOWNSHIP	\$25,339.22	\$25,339.22	\$0.00	\$0.00	\$0.00
DEARBORN	\$73,218.28	\$73,218.28	\$0.00	\$0.00	\$0.00
DEARBORN HEIGHTS	\$18,886.43	\$18,886.43	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$106.64	\$106.64	\$0.00	\$0.00	\$0.00
EASTPOINTE	\$12,784.89	\$12,784.89	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
FARMINGTON	\$2,886.83	\$2,886.83	\$0.00	\$0.00	\$0.00
FARMINGTON HILLS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRASER	\$4,960.88	\$4,960.88	\$0.00	\$0.00	\$0.00
GARDEN CITY	\$6,199.25	\$6,199.25	\$0.00	\$0.00	\$0.00
GROSSE POINTE	\$1,580.76	\$1,580.76	\$0.00	\$0.00	\$0.00
GROSSE POINTE FARMS	\$2,088.99	\$2,088.99	\$0.00	\$0.00	\$0.00
GROSSE POINTE PARK	\$1,182.65	\$1,182.65	\$0.00	\$0.00	\$0.00
GROSSE POINTE SHORES	\$318.17	\$318.17	\$0.00	\$0.00	\$0.00
GROSSE POINTE WOODS	\$2,625.78	\$2,625.78	\$0.00	\$0.00	\$0.00
HAMTRAMCK	\$4,175.13	\$4,175.13	\$0.00	\$0.00	\$0.00
HARPER WOODS	\$1,949.52	\$1,949.52	\$0.00	\$0.00	\$0.00
HARRISON TWP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
HAZEL PARK	\$3,216.57	\$3,216.57	\$0.00	\$0.00	\$0.00
HIGHLAND PARK	\$1,651,474.40	\$7,923.39	\$0.00	\$4,280.79	\$1,639,270.22
HUNTINGTON WOODS	\$286.18	\$286.18	\$0.00	\$0.00	\$0.00
INDEPENDENCE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INKSTER	\$11,119.74	\$11,119.74	\$0.00	\$0.00	\$0.00
KEEGO HARBOR	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LAKE ORION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LATHRUP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LENOX TOWNSHIP	\$325.36	\$325.36	\$0.00	\$0.00	\$0.00
LIVONIA	\$40,152.61	\$40,152.61	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MACOMB TWP	\$206.29	\$206.29	\$0.00	\$0.00	\$0.00
MADISON HEIGHTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MELVINDALE	\$3,629.99	\$3,629.99	\$0.00	\$0.00	\$0.00
NEW HAVEN	\$567.00	\$567.00	\$0.00	\$0.00	\$0.00
NORTHVILLE	\$4,321.94	\$4,321.94	\$0.00	\$0.00	\$0.00
NORTHVILLE TOWNSHIP	\$110,557.99	\$9,148.06	\$0.00	\$4,574.03	\$96,835.90
NOVI	\$17,395.28	\$17,395.28	\$0.00	\$0.00	\$0.00
OAK PARK	\$6,807.06	\$6,807.06	\$0.00	\$0.00	\$0.00
OAKLAND TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORCHARD LAKE VILLAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ORION TOWNSHIP (C-O)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OXFORD TOWNSHIP	\$1,015.02	\$1,015.02	\$0.00	\$0.00	\$0.00
OXFORD VILLAGE	\$1,259.16	\$1,259.16	\$0.00	\$0.00	\$0.00
PLEASANT RIDGE	\$273.77	\$273.77	\$0.00	\$0.00	\$0.00
PLYMOUTH	\$3,915.14	\$3,915.14	\$0.00	\$0.00	\$0.00
PLYMOUTH TOWNSHIP	\$307,737.31	\$25,462.54	\$0.00	\$12,731.27	\$269,543.50
REDFORD TOWNSHIP	\$14,508.43	\$14,508.43	\$0.00	\$0.00	\$0.00
ROCHESTER HILLS	\$18,260.50	\$18,260.50	\$0.00	\$0.00	\$0.00
ROMULUS	\$926.07	\$926.07	\$0.00	\$0.00	\$0.00
ROSEVILLE	\$14,776.82	\$14,776.82	\$0.00	\$0.00	\$0.00
ROYAL OAK	\$13,598.95	\$13,598.95	\$0.00	\$0.00	\$0.00
ROYAL OAK TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SHELBY TOWNSHIP	\$12,178.31	\$12,178.31	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- IWC ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
SOUTHFIELD (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SOUTHFIELD (SEOC)	\$3,800.64	\$3,800.64	\$0.00	\$0.00	\$0.00
ST. CLAIR SHORES	\$12,102.46	\$12,102.46	\$0.00	\$0.00	\$0.00
STERLING HEIGHTS	\$31,379.40	\$31,379.40	\$0.00	\$0.00	\$0.00
TROY (E-F)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TROY (SEOC)	\$37,237.46	\$37,237.46	\$0.00	\$0.00	\$0.00
UTICA	\$2,938.01	\$2,938.01	\$0.00	\$0.00	\$0.00
VAN BUREN TOWNSHIP	\$2,044.19	\$2,044.19	\$0.00	\$0.00	\$0.00
VILLAGE OF FRANKLIN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WASHINGTON TOWNSHIP	\$1,381.10	\$1,381.10	\$0.00	\$0.00	\$0.00
WATERFORD TOWNSHIP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
WAYNE	\$5,017.87	\$5,017.87	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (C-O)	\$944.01	\$944.01	\$0.00	\$0.00	\$0.00
WEST BLOOMFIELD TWP (E-F)	\$6,307.99	\$6,307.99	\$0.00	\$0.00	\$0.00
WESTLAND	\$23,000.17	\$23,000.17	\$0.00	\$0.00	\$0.00
TOTAL IWC ACCOUNTS	\$3,063,757.66	\$613,916.81	\$0.00	\$40,652.55	\$2,409,188.30

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
3M COMPANY	\$4,527.40	\$4,527.40	\$0.00	\$0.00	\$0.00
A & R PACKING CO., LLC	\$4,731.69	\$4,731.69	\$0.00	\$0.00	\$0.00
AACTRON	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACADEMY PACKING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ACME RUSTPROOF	\$42.44	\$42.44	\$0.00	\$0.00	\$0.00
ADVANCED RESOURCE RECOVERY	\$1,209.94	\$1,209.94	\$0.00	\$0.00	\$0.00
AEVITAS SPECIALITY SERVICES	\$20,320.71	\$20,320.71	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALEXANDER & HORNUNG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ALGAL SCIENTIFIC CORPORATION	\$16,533.05	\$0.00	\$0.00	\$0.00	\$16,533.05
ALL CHEM CORP, LLC.	\$(91.23)	\$0.00	\$0.00	\$0.00	\$(91.23)
ALPHA STAMPING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AMERICAN WASTE TECH INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ATWATER IN THE PARK	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AUTOMOTIVE FINISH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
AXLE BREWING COMPANY, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
B. NEKTAR MEADERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BAFFIN BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARON INDUSTRIES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BARTZ BAKERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BASTONE BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BATCH BREWING COMPANY	\$(263.56)	\$0.00	\$0.00	\$0.00	\$(263.56)

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
BAYS MICHIGAN CORPORATION	\$337.03	\$337.03	\$0.00	\$0.00	\$0.00
BEIRUT BAKERY, INC.	\$64.34	\$64.34	\$0.00	\$0.00	\$0.00
BETTER MADE SNACK FOOD	\$19,237.22	\$19,237.22	\$0.00	\$0.00	\$0.00
BLACK LOTUS BREWING CO.	\$174.45	\$0.00	\$72.32	\$0.00	\$102.13
BOZEK'S MARKET	\$61.54	\$61.54	\$0.00	\$0.00	\$0.00
BREW DETROIT	\$3,835.12	\$3,835.12	\$0.00	\$0.00	\$0.00
BROADWAY MKT CORNED BEEF	\$ (39.92)	\$0.00	\$0.00	\$0.00	\$ (39.92)
BROOKS BREWING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
BROWN IRON BREWHOUSE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CANTON BREW WORKS	\$142.63	\$0.00	\$72.32	\$0.00	\$70.31
CAPITAL REPRODUCTIONS	\$1.62	\$1.62	\$0.00	\$0.00	\$0.00
CF BURGER CREAMERY	\$18,270.00	\$18,270.00	\$0.00	\$0.00	\$0.00
CHILANGO'S BAKERY	\$2,213.08	\$134.49	\$31.65	\$23.73	\$2,023.21
CINTAS CORP. - MACOMB TWP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$29,883.41	\$29,883.41	\$0.00	\$0.00	\$0.00
CINTAS CORPORATION	\$13,931.61	\$13,931.61	\$0.00	\$0.00	\$0.00
CITY LAUNDRY, INC.	\$15.95	\$15.95	\$0.00	\$0.00	\$0.00
CLASSIC CONTAINER CORP.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COCA-COLA REFRESHMENTS USA,	\$6,172.09	\$3,661.22	\$1,891.45	\$619.42	\$0.00
COSTCO WHOLESALE STORE	\$2,404.63	\$2,404.63	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$775.84	\$775.84	\$0.00	\$0.00	\$0.00
COSTCO WHOLESALE STORE	\$3,222.21	\$3,222.21	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
COSTCO WHOLESALE STORE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
COUNTRY FRESH DAIRY CO.	\$2,216.17	\$2,216.17	\$0.00	\$0.00	\$0.00
CROSS CHEMICAL COMPANY, INC.	\$2,057.90	\$1,029.10	\$0.00	\$0.00	\$1,028.80
DARLING INGREDIENTS, INC.	\$6,551.31	\$6,551.31	\$0.00	\$0.00	\$0.00
DAVE'S SAUSAGE FACTORY 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN BREWING	\$37.91	\$0.00	\$37.91	\$0.00	\$0.00
DEARBORN SAUSAGE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DEARBORN SAUSAGE CO., INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT BEER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT LINEN SERVICE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT METRO WC AIRPORT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT RIVERTOWN BREWERY CC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DETROIT SAUSAGES CO INC	\$47.55	\$30.77	\$16.78	\$0.00	\$0.00
DETRONIC INDUSTRIES, INC.	\$144.01	\$144.01	\$0.00	\$0.00	\$0.00
DIFCO LABORATORIES, INC.	\$23,397.86	\$23,397.86	\$0.00	\$0.00	\$0.00
DIVERSIFIED CHEM TECH. INC.	\$183.97	\$183.97	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$1,037.60	\$1,037.60	\$0.00	\$0.00	\$0.00
DOMESTIC UNIFORM RENTAL	\$2,987.03	\$2,874.72	\$112.31	\$0.00	\$0.00
E.W. GROBBEL'S SONS, INC.	\$4,070.43	\$4,070.43	\$0.00	\$0.00	\$0.00
EASTERN MARKET BREWING COMP	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ENVIROSOLIDS, L.L.C.	\$120,524.02	\$0.00	\$0.00	\$16,440.32	\$104,083.70
EQ DETROIT, INC.	\$944.28	\$944.28	\$0.00	\$0.00	\$0.00
EQ DETROIT, INC.	\$2,461.80	\$2,461.80	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
EQ DETROIT, INC.	\$ (1,238.68)	\$0.00	\$0.00	\$0.00	\$ (1,238.68)
EQ DETROIT, INC.	\$ (4,588.68)	\$0.00	\$0.00	\$0.00	\$ (4,588.68)
ETON ST BREWERY- GRIFFIN CLA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
EXTRUDE HONE CORPORATION	\$117.45	\$117.45	\$0.00	\$0.00	\$0.00
EXTRUDEHODE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FARMINGTON BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FAYGO BEVERAGES, INC.	\$480,938.99	\$81,043.80	\$51,276.74	\$53,249.28	\$295,369.17
FORD NEW MODEL PROGRAM	\$583.27	\$583.27	\$0.00	\$0.00	\$0.00
FOUNDERS BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$865.98	\$865.98	\$0.00	\$0.00	\$0.00
FRESH-PAK	\$7,461.41	\$7,461.41	\$0.00	\$0.00	\$0.00
G2O ENERGY, LLC	\$2,230.04	\$2,230.04	\$0.00	\$0.00	\$0.00
GENERAL LINEN SUPPLY CO.	\$69,493.69	\$12,420.21	\$6,181.90	\$6,040.92	\$44,850.66
GLOBAL TITANIUM, INC.	\$5,518.90	\$5,518.90	\$0.00	\$0.00	\$0.00
GLOBAL TITANIUM, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
GRANITE CITY FOOD & BREWERY	\$245.32	\$0.00	\$115.99	\$0.00	\$129.33
GREAT BARABOO BREWING CO.	\$ (2,187.50)	\$0.00	\$0.00	\$0.00	\$ (2,187.50)
HACIENDA MEXICAN FOODS	\$5,122.75	\$2,487.62	\$0.00	\$0.00	\$2,635.13
HENKEL CORPORATION	\$473.94	\$473.94	\$0.00	\$0.00	\$0.00
HOME STYLE FOOD INC.	\$4,150.23	\$4,150.23	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
HOOD CLEANERS	\$210.36	\$0.00	\$0.00	\$0.00	\$210.36
HOUGHTON INTERNATIONAL INC.	\$388.12	\$388.12	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$224.70	\$224.70	\$0.00	\$0.00	\$0.00
HOUGHTON INTERNATIONAL INC.	\$7,549.92	\$7,549.92	\$0.00	\$0.00	\$0.00
HUNTINGTON CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
INDUSTRIAL METAL COATING	\$326.18	\$326.18	\$0.00	\$0.00	\$0.00
ISLAMIC SLAUGHTER HOUSE	\$644.39	\$644.39	\$0.00	\$0.00	\$0.00
ITALIAN BUTTER BREAD STICKS	\$7.91	\$7.91	\$0.00	\$0.00	\$0.00
J & G FOOD PRODUCTS, INC.	\$69.94	\$69.94	\$0.00	\$0.00	\$0.00
JAMEX BREWING CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KAR NUT PRODUCTS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
KOWALSKI SAUSAGES, CO.	\$541.15	\$541.15	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$591.23	\$591.23	\$0.00	\$0.00	\$0.00
LA MICHOACANA FLOUR TORTILLA	\$50.20	\$50.20	\$0.00	\$0.00	\$0.00
LEAR CORPORATION DBA EAGLE C	\$5,652.06	\$5,652.06	\$0.00	\$0.00	\$0.00
LIBERTY STREET PROD. BREWERY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
LILY'S SEAFOOD GRILL & BREWE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MACDERMID, INC.	\$5,018.68	\$4,916.73	\$101.95	\$0.00	\$0.00
MCNICHOLS POLISHING & ANODIZ	\$50.29	\$35.00	\$0.00	\$15.29	\$0.00
MELLO MEATS INC, - KUBISCH S	\$111.90	\$111.90	\$0.00	\$0.00	\$0.00
METROPOLITAN BAKERY	\$474.69	\$474.69	\$0.00	\$0.00	\$0.00
MIBA HYDRAMECHANICA CORP.	\$91.81	\$91.81	\$0.00	\$0.00	\$0.00
MICHIGAN DAIRY	\$84,739.34	\$84,739.34	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
MICHIGAN PROD. MACHINING	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MICHIGAN SOY PRODUCTS CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MIDWEST WIRE PRODUCTS, INC.	\$ (2.94)	\$0.00	\$0.00	\$0.00	\$ (2.94)
MILANO BAKERY	\$1,418.44	\$1,418.44	\$0.00	\$0.00	\$0.00
MILTON CHILI CO.	\$39.04	\$39.04	\$0.00	\$0.00	\$0.00
MINNIE MARIE BAKERS, INC	\$4,415.34	\$4,415.34	\$0.00	\$0.00	\$0.00
MISTER UNIFORM & MAT RENTALS	\$103.77	\$23.63	\$27.74	\$52.40	\$0.00
MOTOR CITY BREWING WORKS	\$ (23.25)	\$0.00	\$0.00	\$0.00	\$ (23.25)
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NATIONAL CHILI COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTH CENTER BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NORTHERN LAKES SEAFOOD & MEAT	\$52.64	\$52.64	\$0.00	\$0.00	\$0.00
OAKWOOD BAKERY	\$160.58	\$160.58	\$0.00	\$0.00	\$0.00
PARKER'S HILLTOP BREWER & SE	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PELLERITO FOODS INC.	\$2,027.75	\$2,027.75	\$0.00	\$0.00	\$0.00
PEPSI COLA, INC.	\$42,565.06	\$42,565.06	\$0.00	\$0.00	\$0.00
PERSONAL UNIFORM SERVICE, IN	\$34.67	\$34.67	\$0.00	\$0.00	\$0.00
PETRO ENVIRON TECH, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PINE TREE ACRES, INC.	\$41,692.25	\$41,692.25	\$0.00	\$0.00	\$0.00
PLATING SPEC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
POWER VAC OF MICHIGAN, INC.	\$78.97	\$78.97	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
PREMIER PLATING, LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PRODUCTION SPRING, LLC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
QUALA SERVICES, LLC	\$822.63	\$822.63	\$0.00	\$0.00	\$0.00
RAY'S ICE CREAM CO.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RED SPOT PAINT #409139	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
RIVER ROUGE BREWING COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROAK BREWING CO. LLC	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS BEER COMPANY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
ROCHESTER MILLS PROD BREWERY	\$2,005.73	\$0.00	\$2,005.73	\$0.00	\$0.00
RTT	\$23,842.21	\$0.00	\$0.00	\$123.61	\$23,718.60
SEAFARE FOODS, INC.	\$150.58	\$150.58	\$0.00	\$0.00	\$0.00
SHERWOOD BREWING COMPANY	\$819.08	\$0.00	\$707.30	\$111.78	\$0.00
SMITH-WATKINS, LLC	\$ (1,775.84)	\$0.00	\$ (1,775.84)	\$0.00	\$0.00
SPRAYTEK, INC.	\$46.16	\$34.28	\$11.88	\$0.00	\$0.00
SWEETHEART BAKERY, INC.	\$940.37	\$152.86	\$75.72	\$72.86	\$638.93
THE CROWN GROUP-LIVONIA PLAN	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
THE ROYAL OAK BREWERY	\$ (1,531.50)	\$0.00	\$0.00	\$0.00	\$ (1,531.50)
TOM LAUNDRY CLEANERS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TRAFFIC JAM & SNUG	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TURRI'S ITALIAN FOODS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
U-METCO, INC.	\$1,124.47	\$1,124.47	\$0.00	\$0.00	\$0.00
UNCLE RAYS SNACKS, LLC	\$38,242.49	\$38,242.49	\$0.00	\$0.00	\$0.00

GLWA Aged Accounts Receivable- POLLUTANT SURCHARGE ACCOUNTS

Balances as of 12/31/18

Customer Name	Total Due	Current	46 - 74 Days	75 - 104 Days	>105 Days
UNCLE RAYS SNACKS, LLC	\$180.04	\$180.04	\$0.00	\$0.00	\$0.00
UNIQUE LINEN SERVICES, INC.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
UNITED FISH DISTRIBUTORS	\$7.98	\$7.98	\$0.00	\$0.00	\$0.00
UNITED LINEN SERVICE, LLC.	\$287.30	\$287.30	\$0.00	\$0.00	\$0.00
UNITED MEAT & DELI	\$464.39	\$464.39	\$0.00	\$0.00	\$0.00
US ECOLOGY MICHIGAN	\$(1,101.62)	\$0.00	\$0.00	\$0.00	\$(1,101.62)
US ECOLOGY ROMULUS, INC.	\$4,258.55	\$4,258.55	\$0.00	\$0.00	\$0.00
USHER OIL SERVICES	\$4,591.80	\$4,591.80	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS	\$9,979.10	\$9,979.10	\$0.00	\$0.00	\$0.00
VERNDALE PRODUCTS, INC.	\$3,875.88	\$3,875.88	\$0.00	\$0.00	\$0.00
VERNOR FOOD PRODUCTS	\$100.41	\$64.15	\$27.89	\$8.37	\$0.00
WIGLEY'S MEAT PROCESS	\$344.09	\$344.09	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$1,829.60	\$1,829.60	\$0.00	\$0.00	\$0.00
WINTER SAUSAGE MFG. CO.	\$72.07	\$72.07	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO	\$6,527.06	\$6,527.06	\$0.00	\$0.00	\$0.00
WOLVERINE PACKING CO.	\$2,761.18	\$2,761.18	\$0.00	\$0.00	\$0.00
WOODWARD AVENUE BREWERS	\$219.55	\$0.00	\$219.55	\$0.00	\$0.00
TOTAL POLLUTANT SURCHARGE ACCOUNTS	\$1,181,951.19	\$563,657.42	\$61,211.29	\$76,757.98	\$480,324.50

City of Highland Park Billings and Collections

	<u>Water</u>	<u>Sewer</u>	<u>IWC</u>	<u>Cumulative Total</u>
June 30, 2012 Balance	\$ -	\$ 10,207,956	\$ 852,987	\$ 11,060,943
FY 2013 Billings	485,887	4,987,635	154,444	5,627,966
FY 2013 Payments	<u>(65,652)</u>	<u>(2,206,211)</u>	<u>-</u>	<u>(2,271,863)</u>
				-
June 30, 2013 Balance	\$ 420,235	\$ 12,989,380	\$ 1,007,431	\$ 14,417,046
FY 2014 Billings	1,004,357	6,980,442	161,951	8,146,750
FY 2014 Payments	<u>-</u>	<u>(1,612,633)</u>	<u>-</u>	<u>(1,612,633)</u>
				-
June 30, 2014 Balance	\$ 1,424,592	\$ 18,357,189	\$ 1,169,382	\$ 20,951,163
FY 2015 Billings	1,008,032	5,553,123	165,739	6,726,894
FY 2015 Payments	<u>-</u>	<u>(1,444,623)</u>	<u>-</u>	<u>(1,444,623)</u>
				-
June 30, 2015 Balance	\$ 2,432,625	\$ 22,465,689	\$ 1,335,121	\$ 26,233,435
FY 2016 Billings	1,157,178	5,612,167	106,431	6,875,776
FY 2016 Payments	<u>-</u>	<u>(2,022,335)</u>	<u>-</u>	<u>(2,022,335)</u>
				-
June 30, 2016 Balance	\$ 3,589,803	\$ 26,055,521	\$ 1,441,551	\$ 31,086,875
FY 2017 Billings	1,245,267	5,802,000	101,999	7,149,265
FY 2017 Payments	<u>-</u>	<u>(2,309,186)</u>	<u>-</u>	<u>(2,309,186)</u>
				-
June 30, 2017 Balance	\$ 4,835,070	\$ 29,548,335	\$ 1,543,550	\$ 35,926,954
FY 2018 Billings	1,277,179	5,657,101	80,472	7,014,752
FY 2018 Payments	<u>-</u>	<u>(4,108,108)</u>	<u>-</u>	<u>(4,108,108)</u>
				-
June 30, 2018 Balance	\$ 6,112,248	\$ 31,097,327	\$ 1,624,022	\$ 38,833,597
FY 2019 Billings (6 Months)	643,248	2,809,701	27,452	3,480,401
FY 2019 Payments (6 Months)	<u>-</u>	<u>(629,017)</u>	<u>-</u>	<u>(629,017)</u>
				-
Balance as of December 31, 2018	<u>\$ 6,755,496</u>	<u>\$ 33,278,011</u>	<u>\$ 1,651,474</u>	<u>\$ 41,684,982</u>